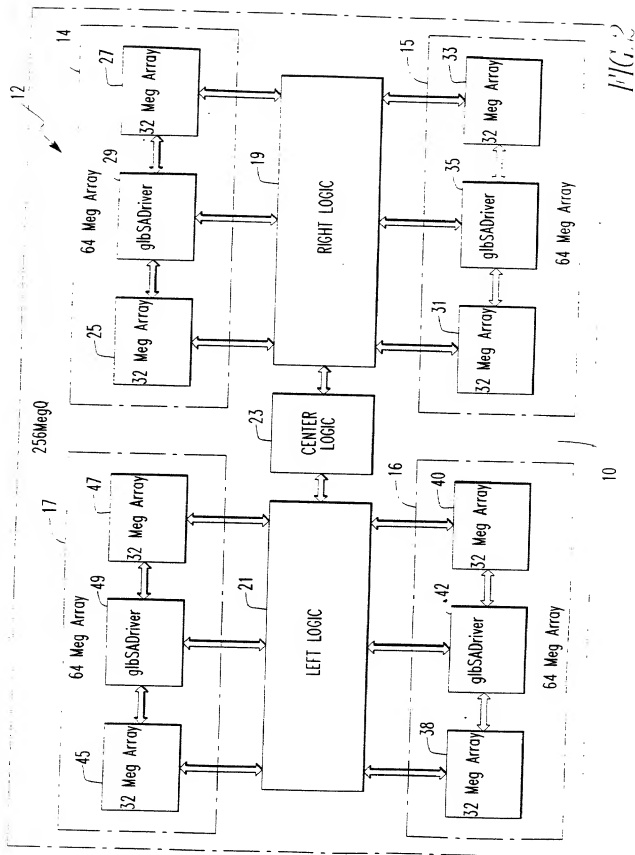


FIG. 1



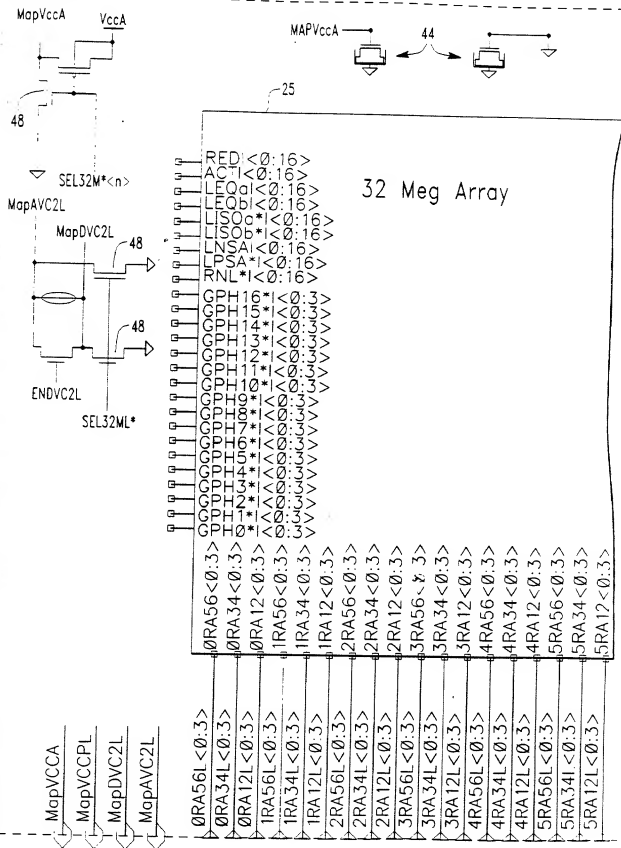
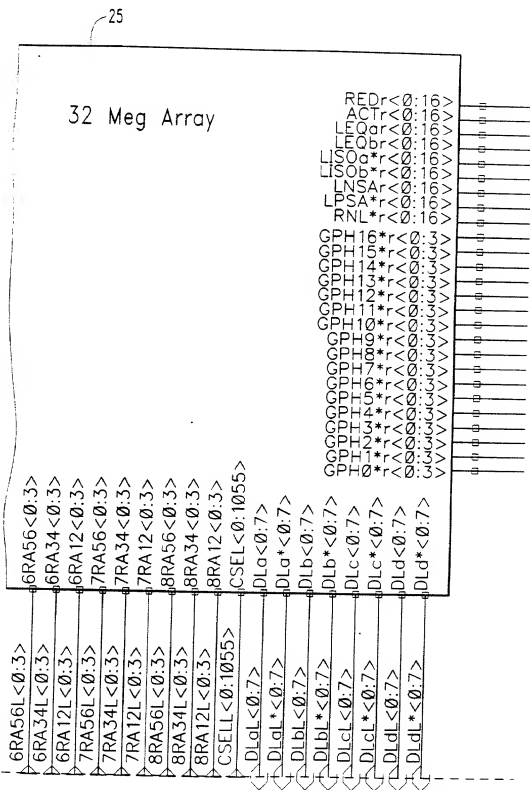


FIG. 3B

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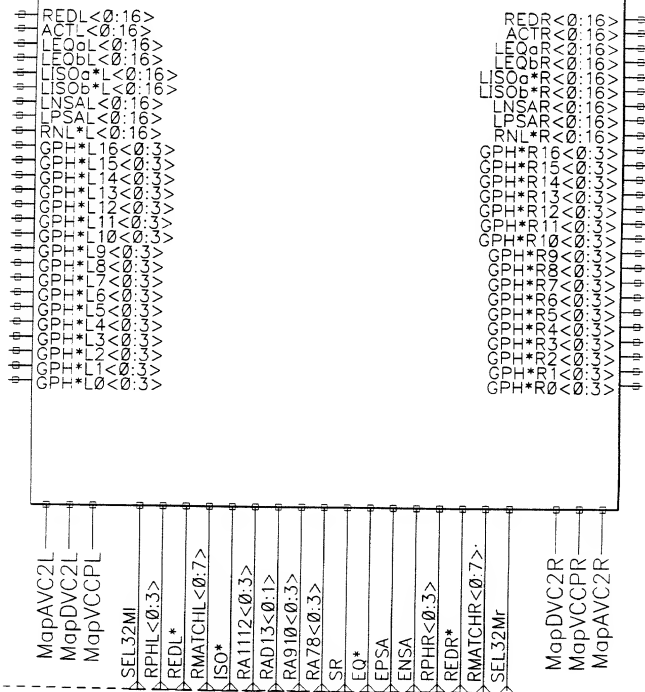


FIG. 3D

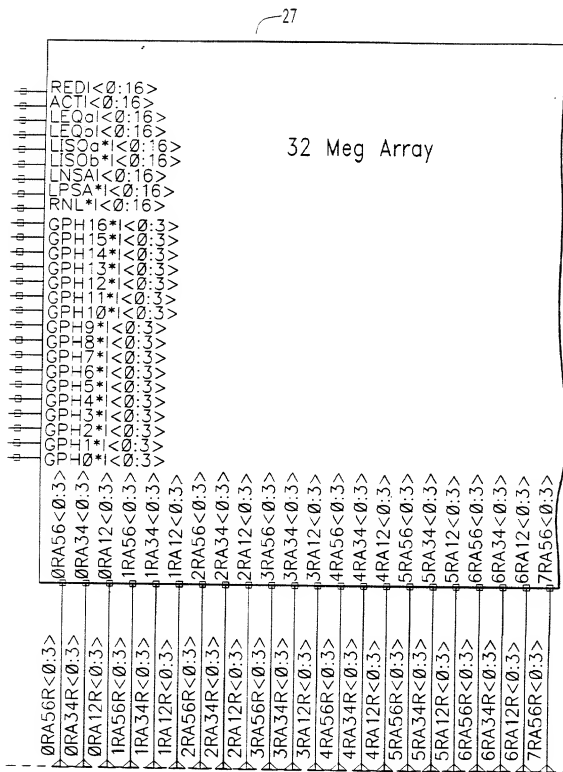
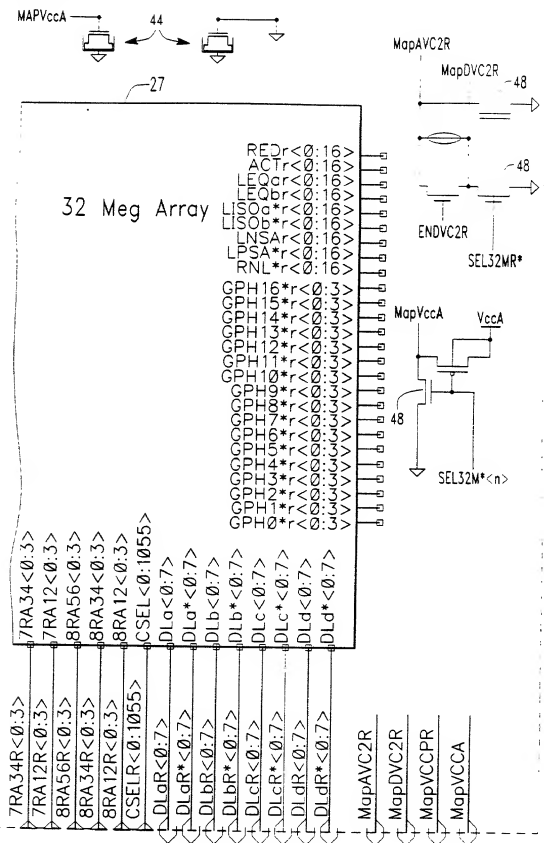


FIG. 3E



32MEG ARRAY

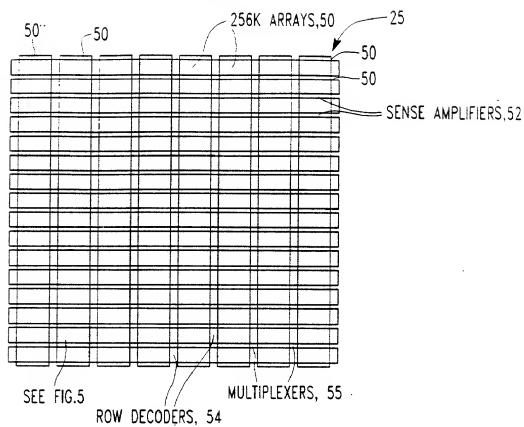


FIG. 4

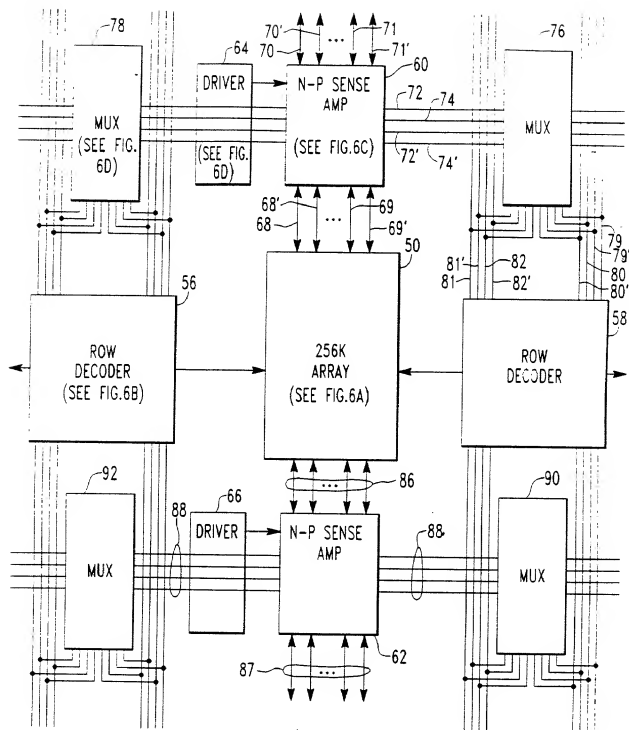


FIG. 5

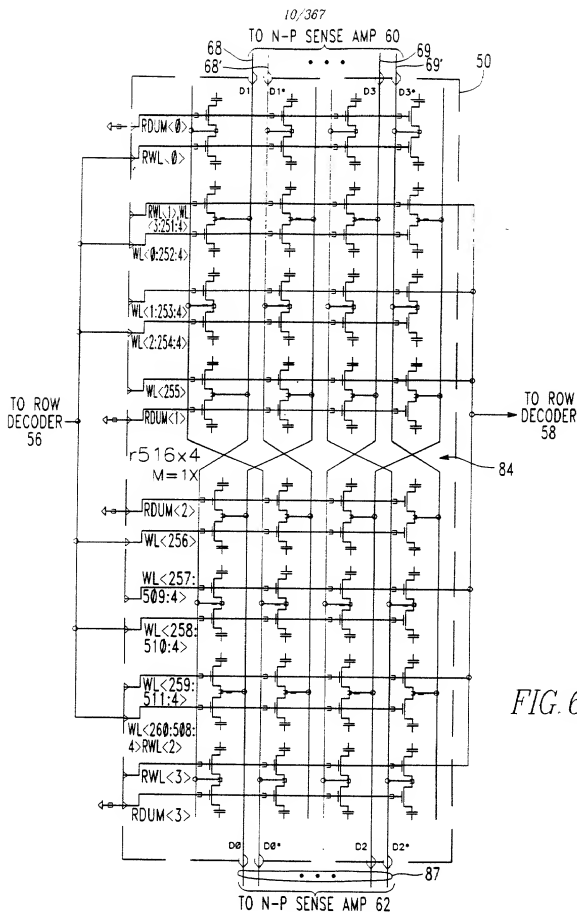


FIG. 6A

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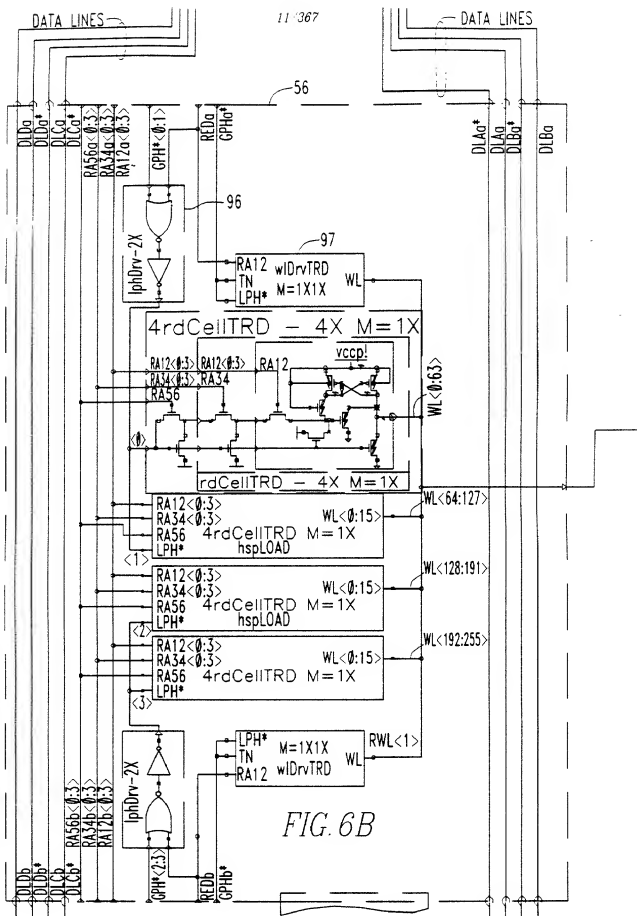


FIG. 6B

Connections of odd/even
columns to IOa and IOb
alternates with odd/even
column select lines:
CA01* D1(even) D2(odd)

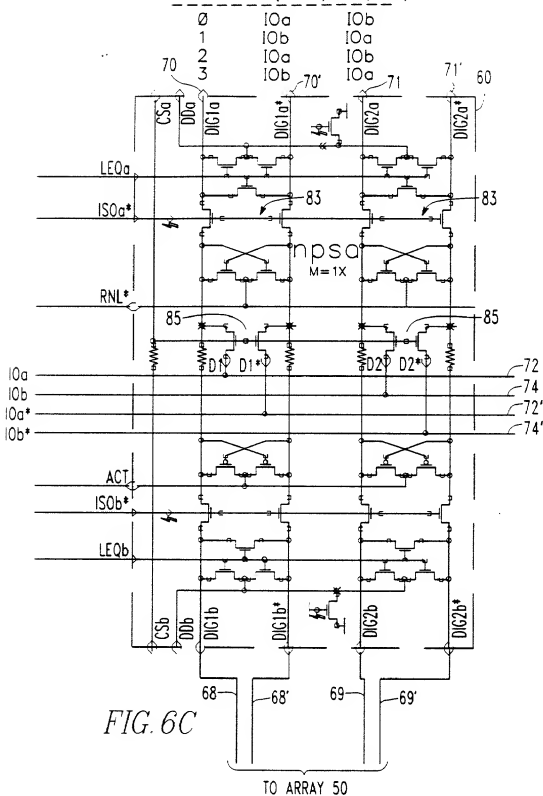


FIG. 6C

TO ARRAY 50

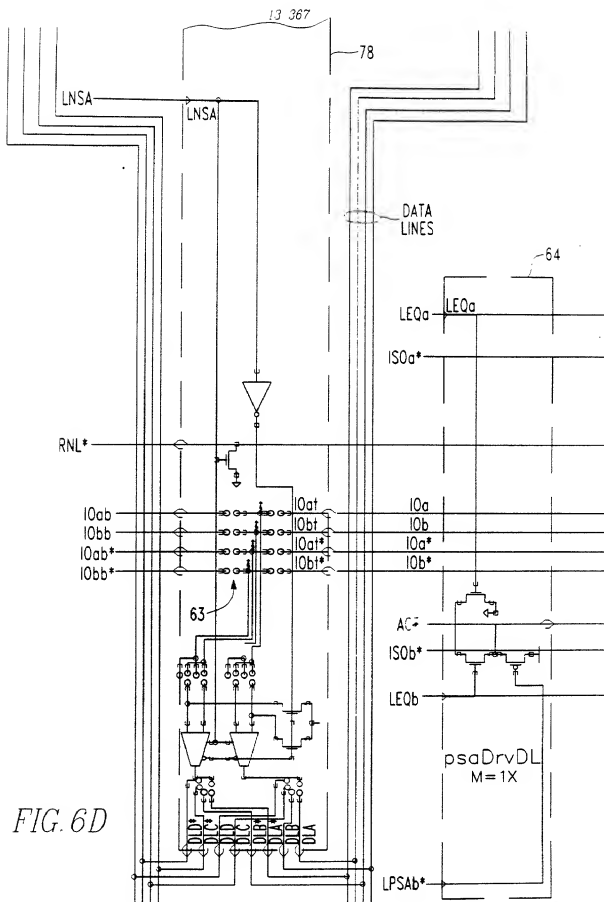


FIG. 6D



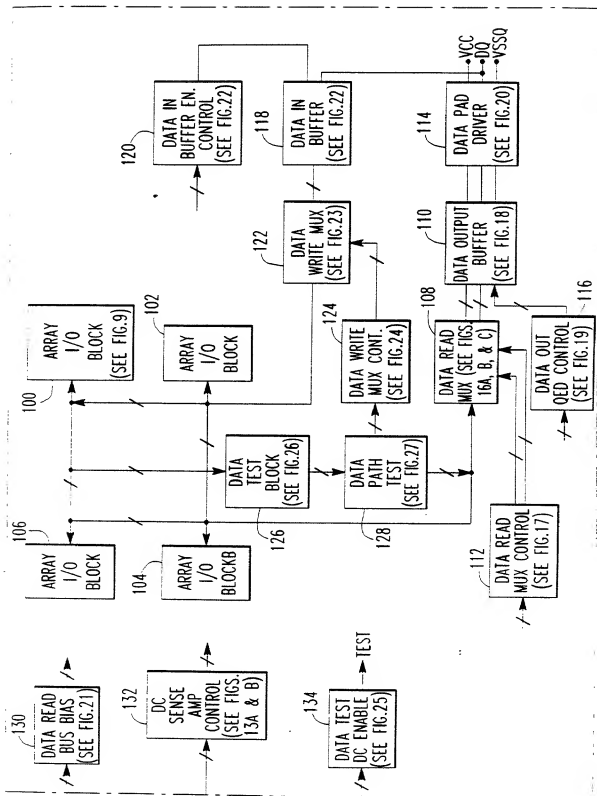


FIG. 8

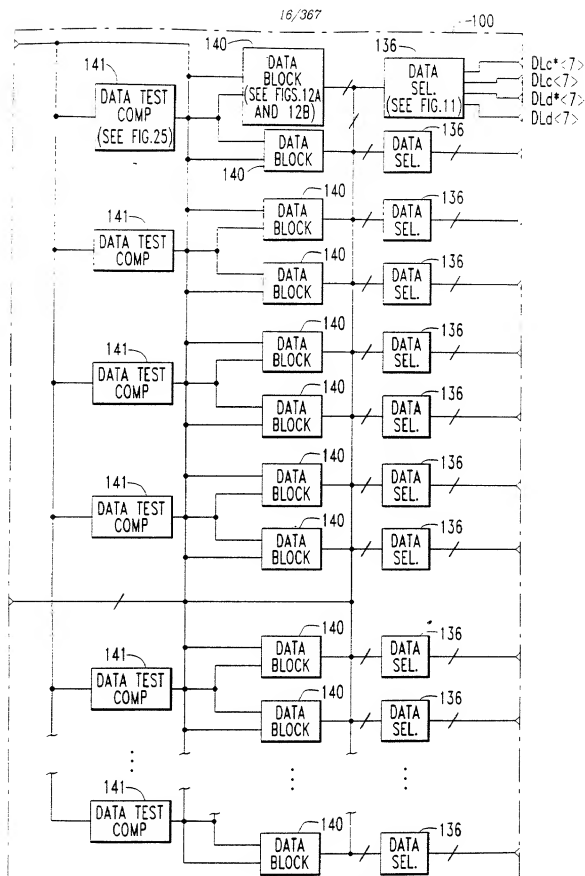


FIG. 9

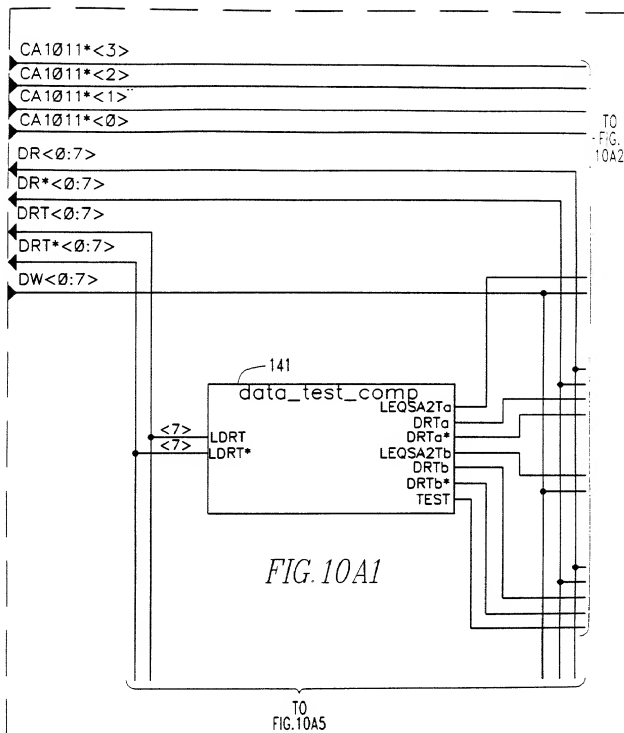


FIG. 10A2

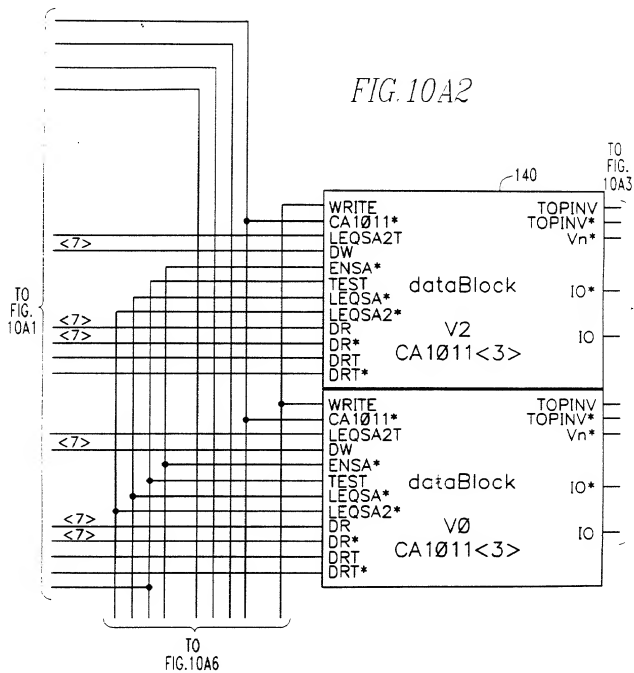
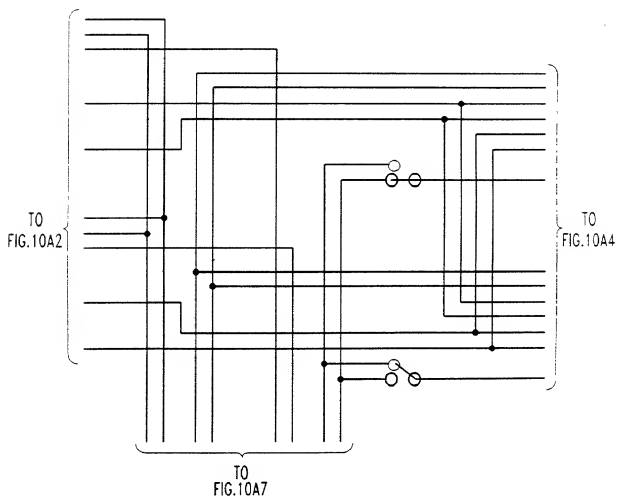


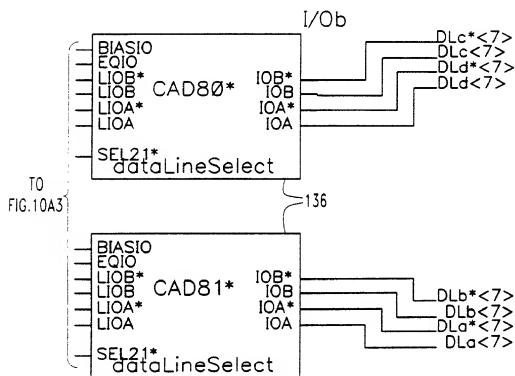
FIG. 10A3



arrayIOBlock

100

FIG. 10A4



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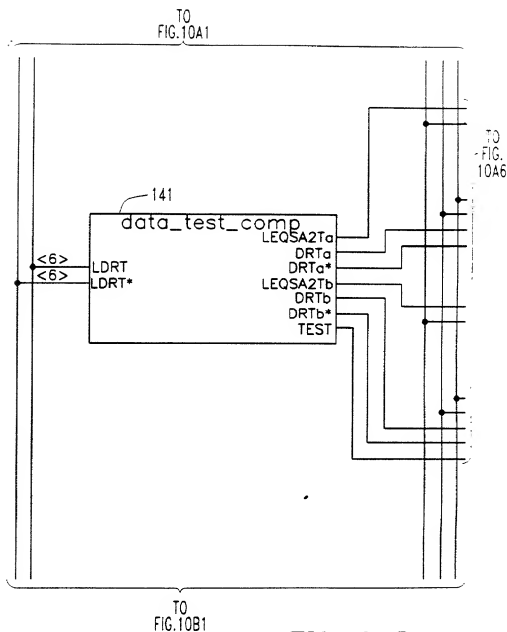


FIG. 10A5

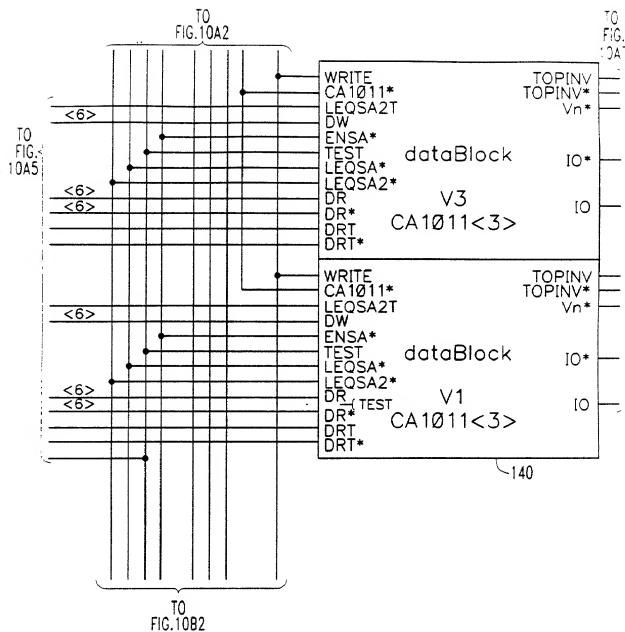


FIG. 10A6

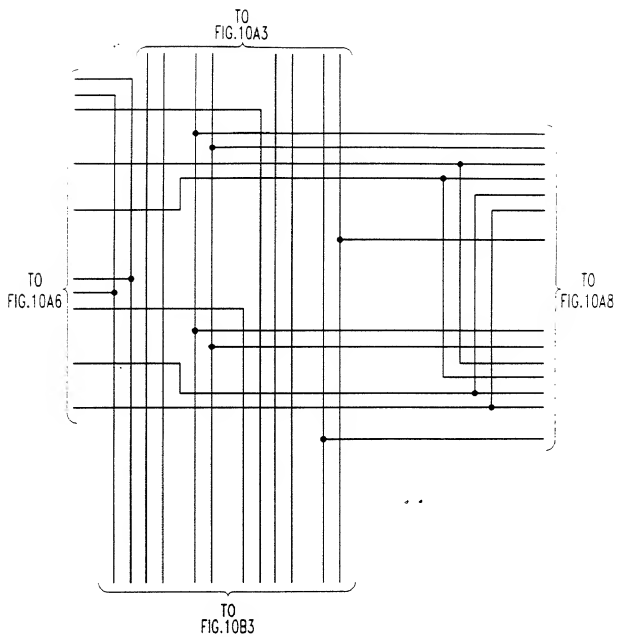


FIG. 10A7

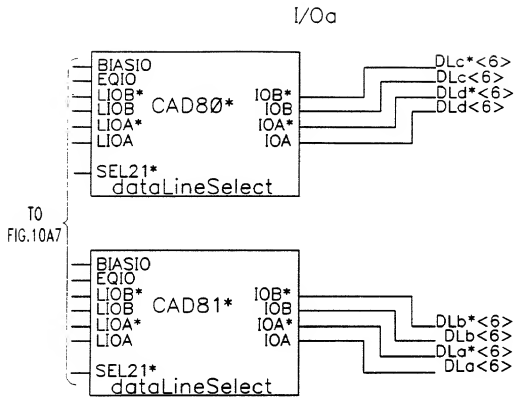


FIG. 10A8

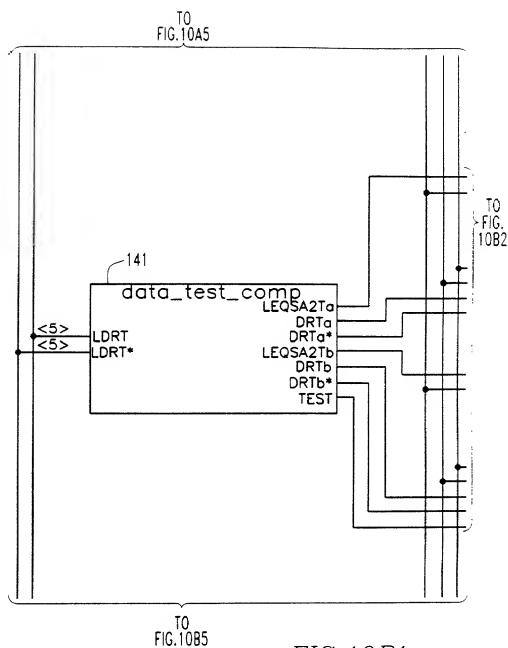


FIG. 10B1

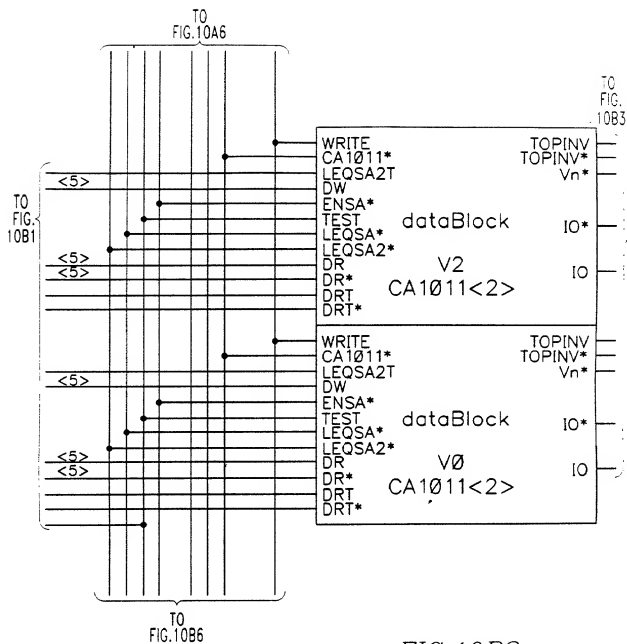


FIG. 10B2

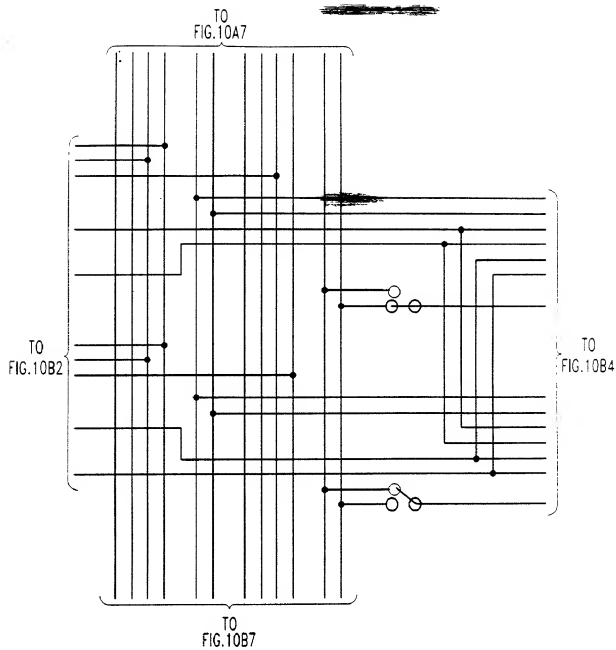


FIG. 10B3

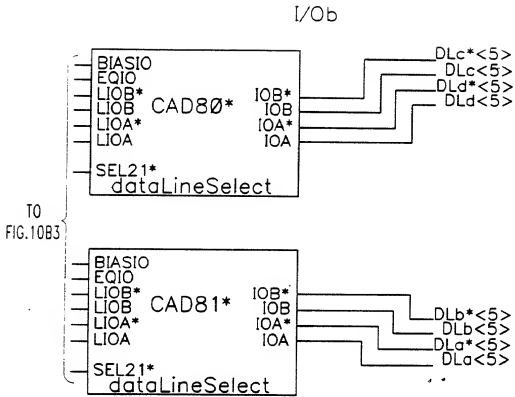


FIG. 10B4

FIG. 10B5

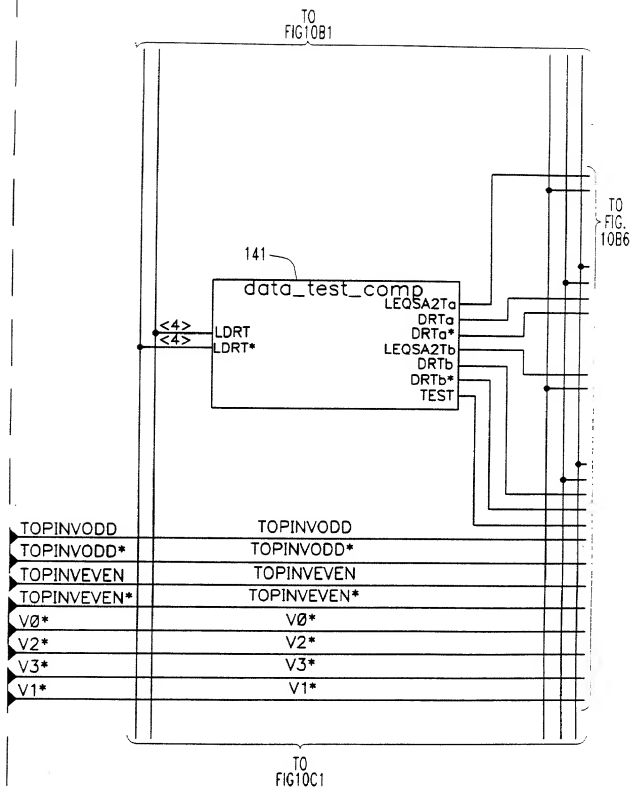
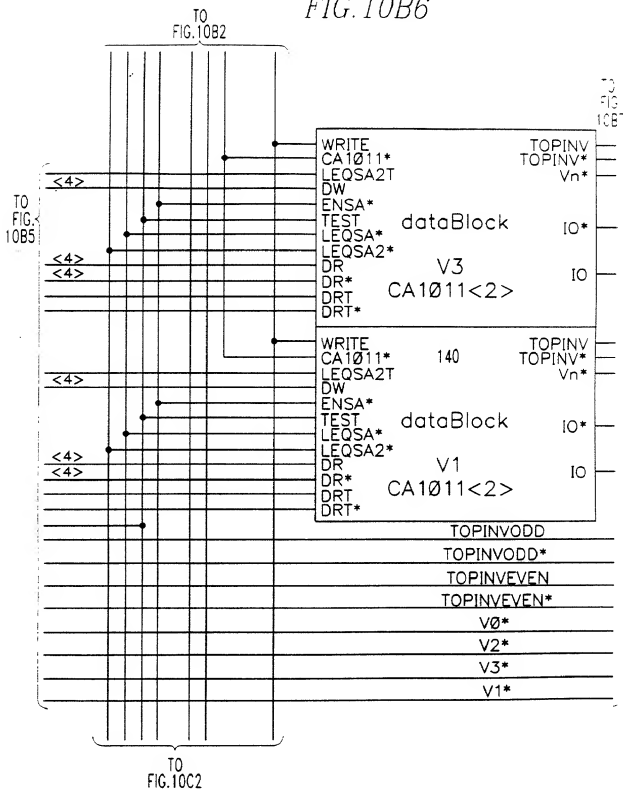
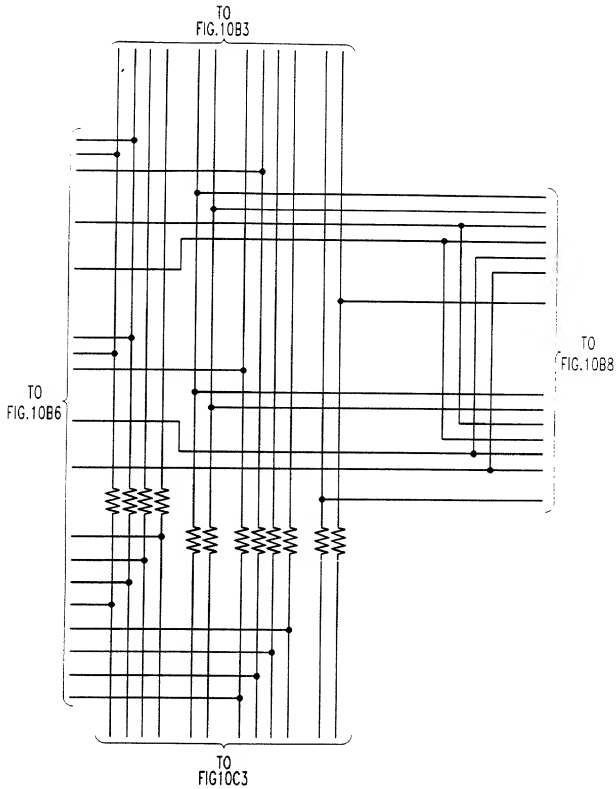


FIG. 10B6



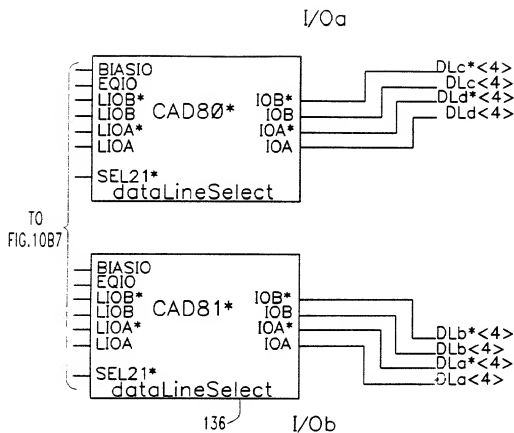
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FIG. 10B7



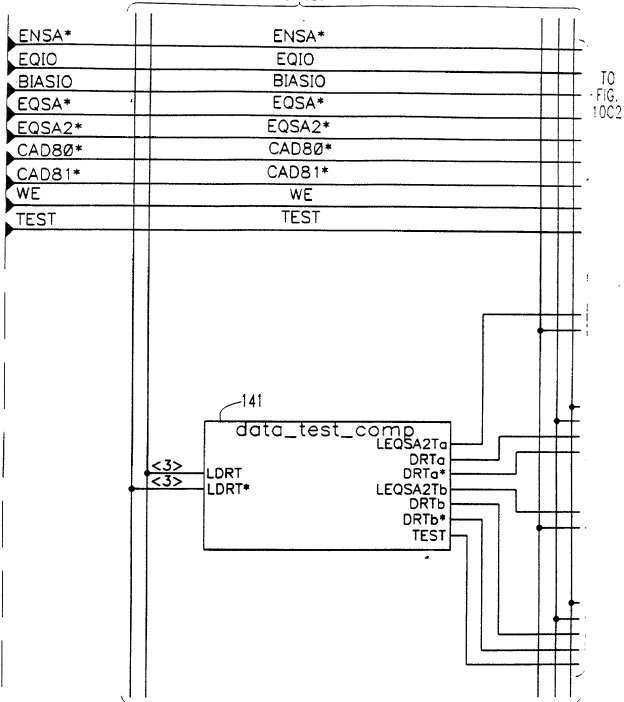
0989977-070601

FIG. 10B8



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TO
FIG.10B5



TO
FIG.10C5

FIG.10C1

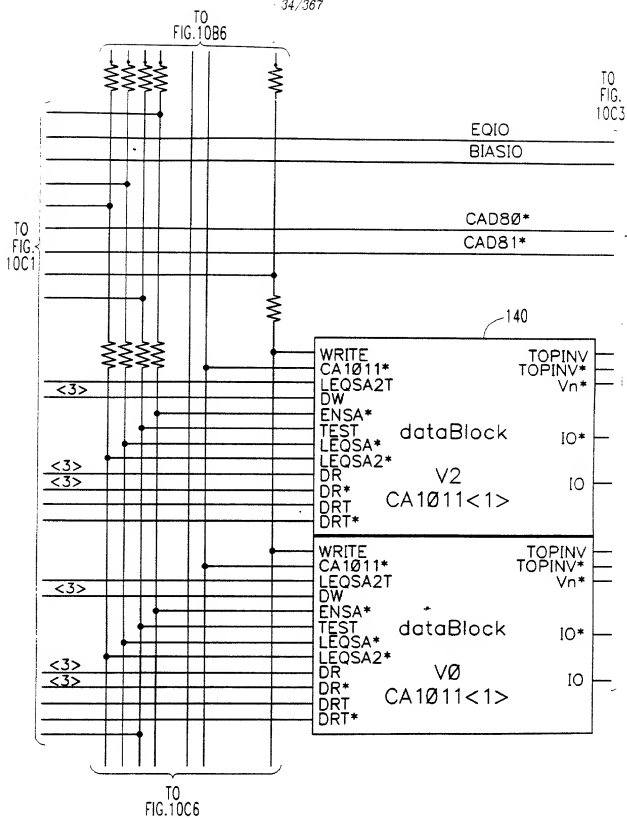


FIG. 10C2

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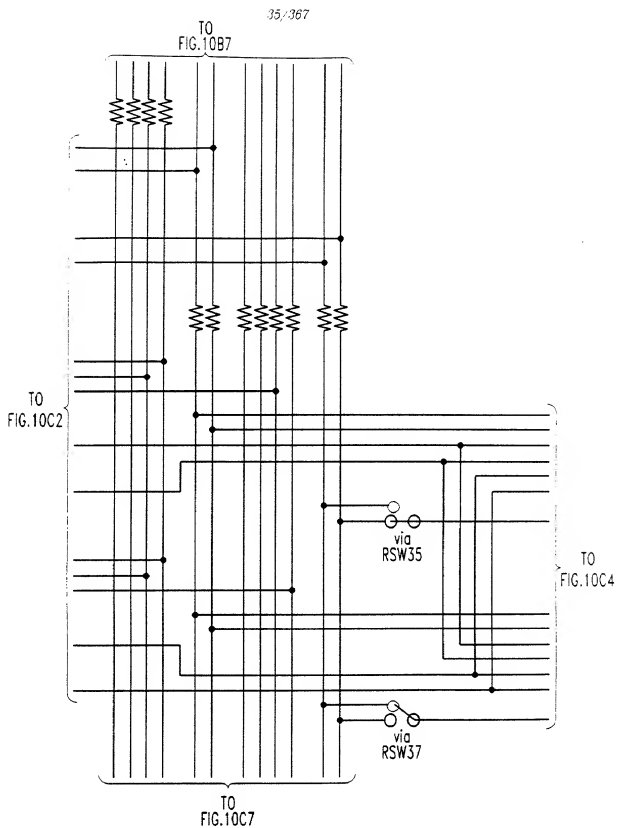
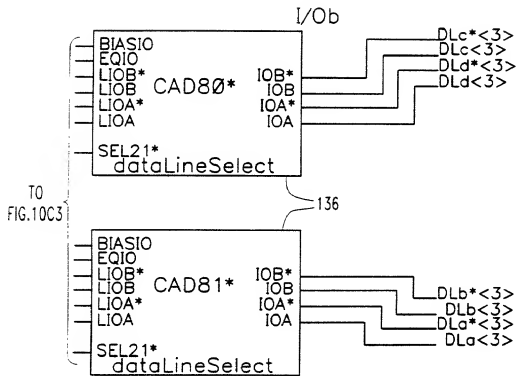


FIG. 10C4



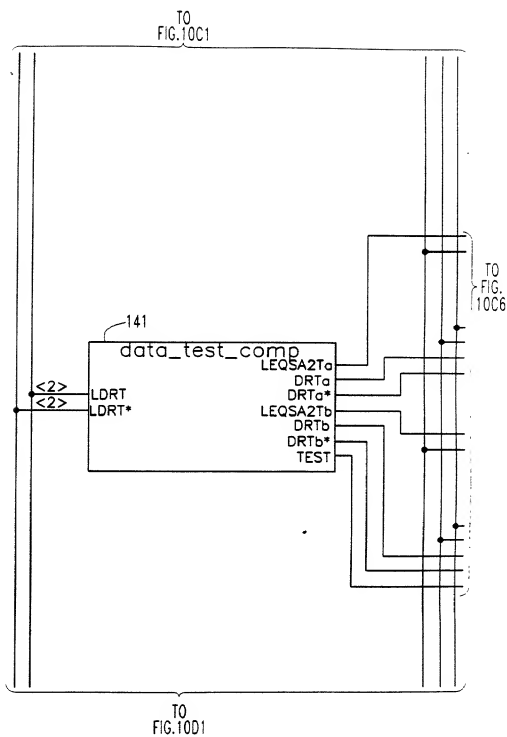


FIG.10C5

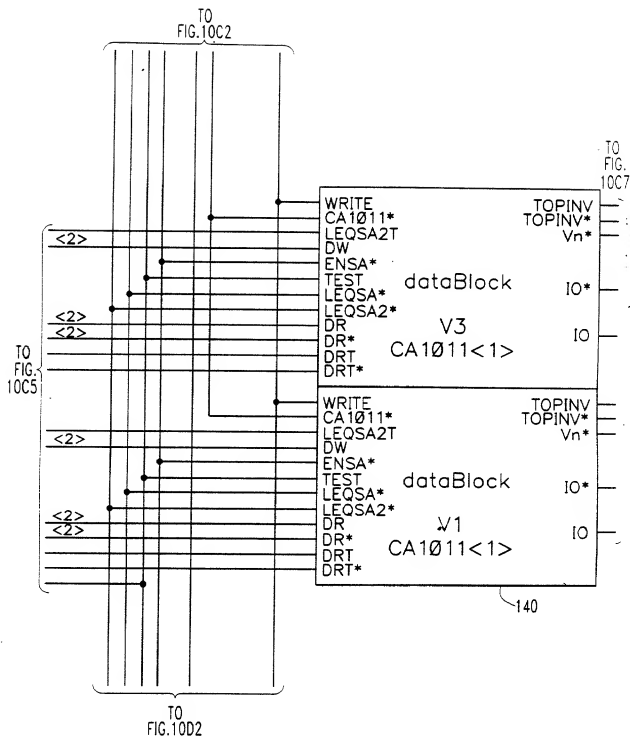
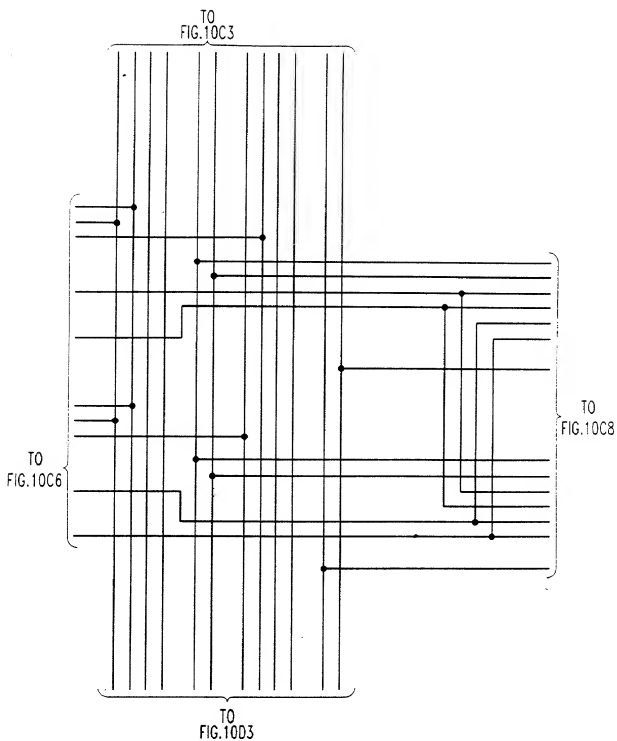


FIG. 10C6



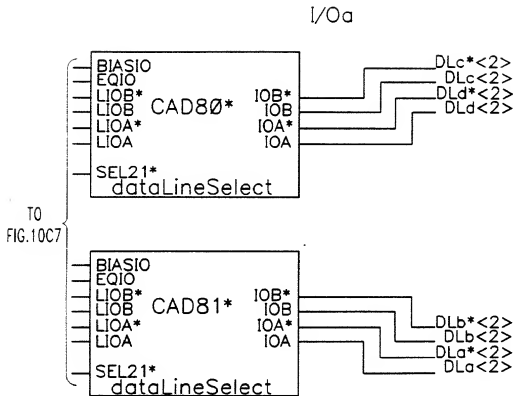


FIG.10C8

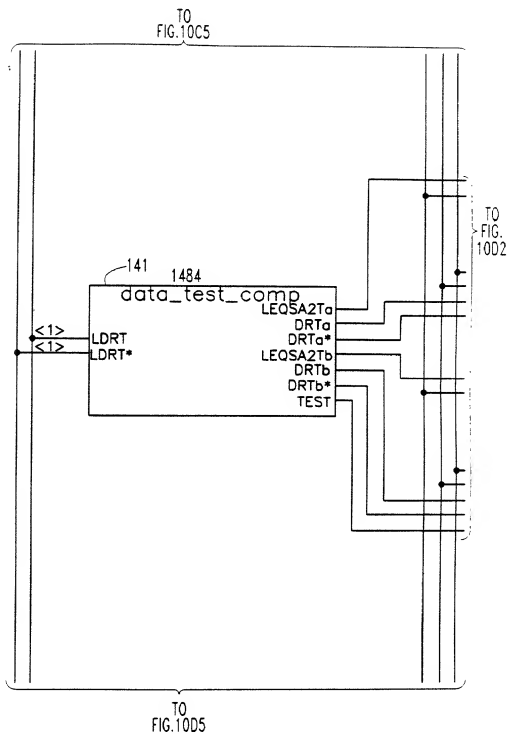


FIG. 10D1

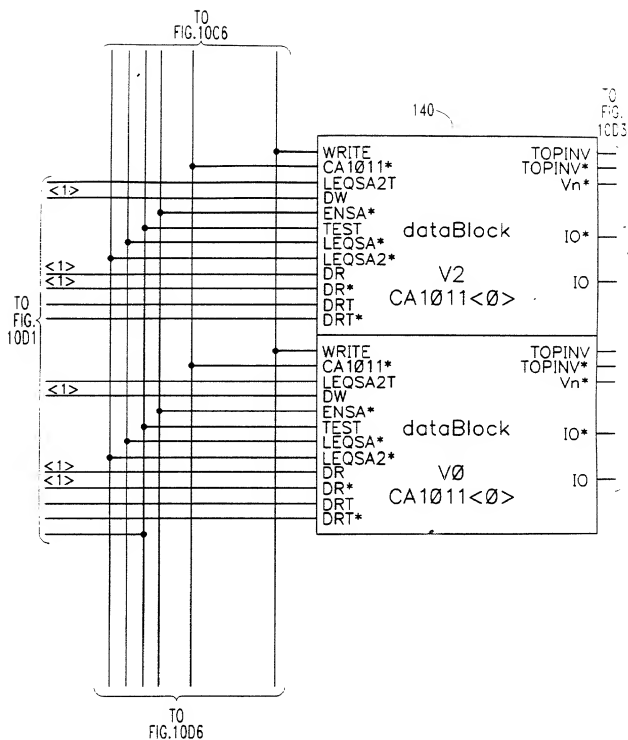


FIG. 10D2

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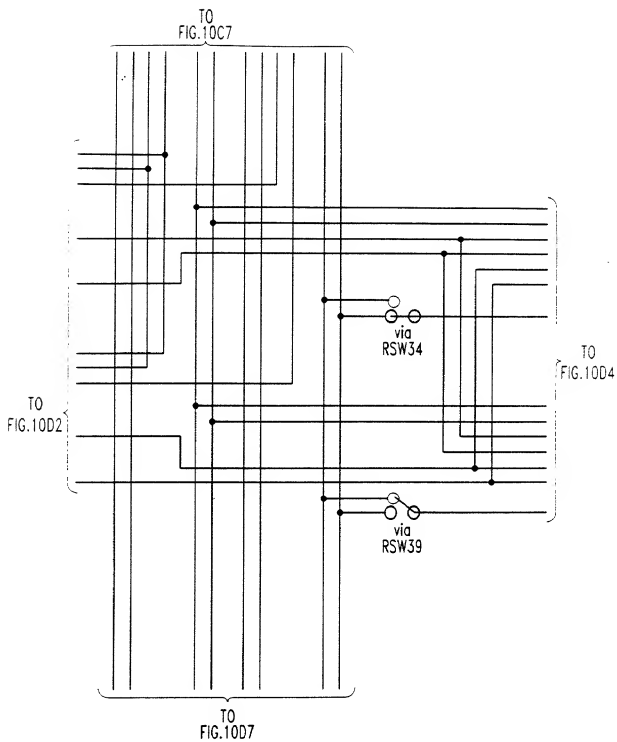


FIG. 10D3

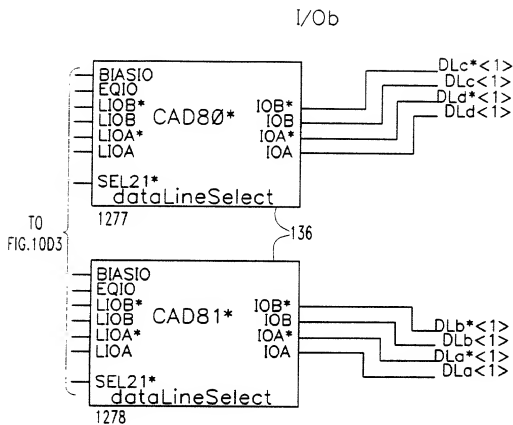


FIG. 10D4

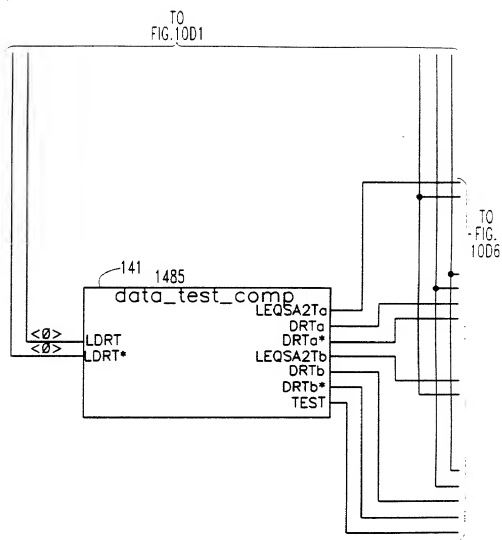


FIG. 10D5

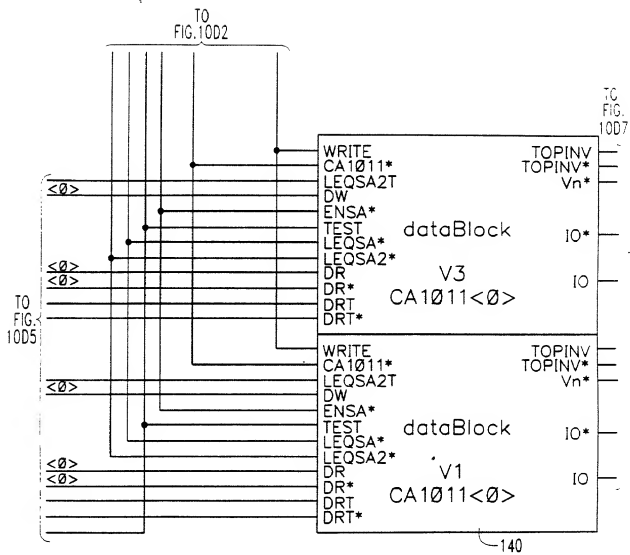
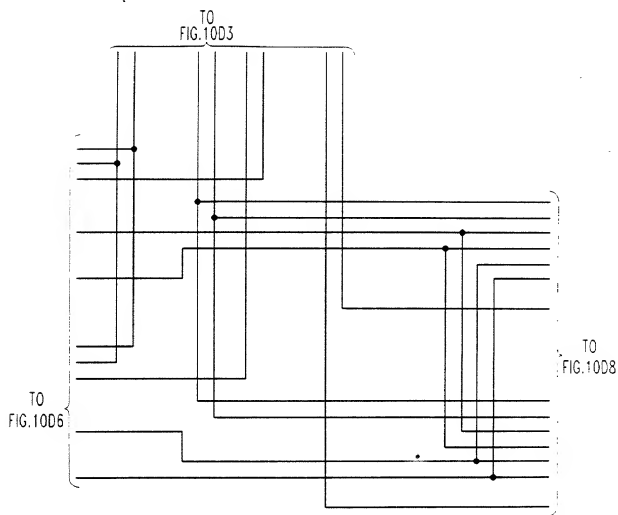


FIG. 10D6

09899977.070601



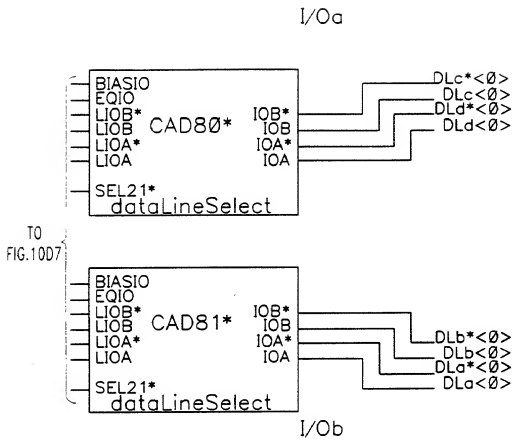


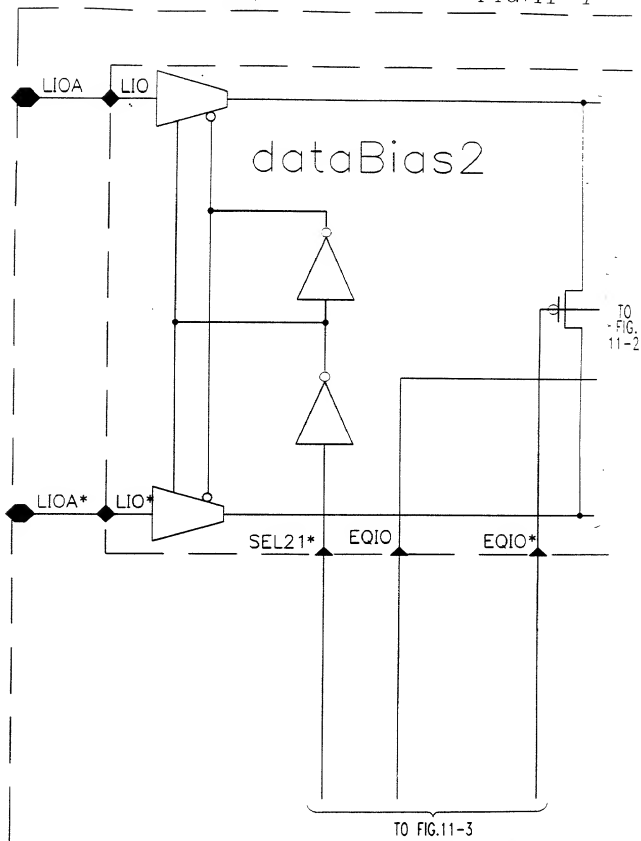
FIG. 10D8

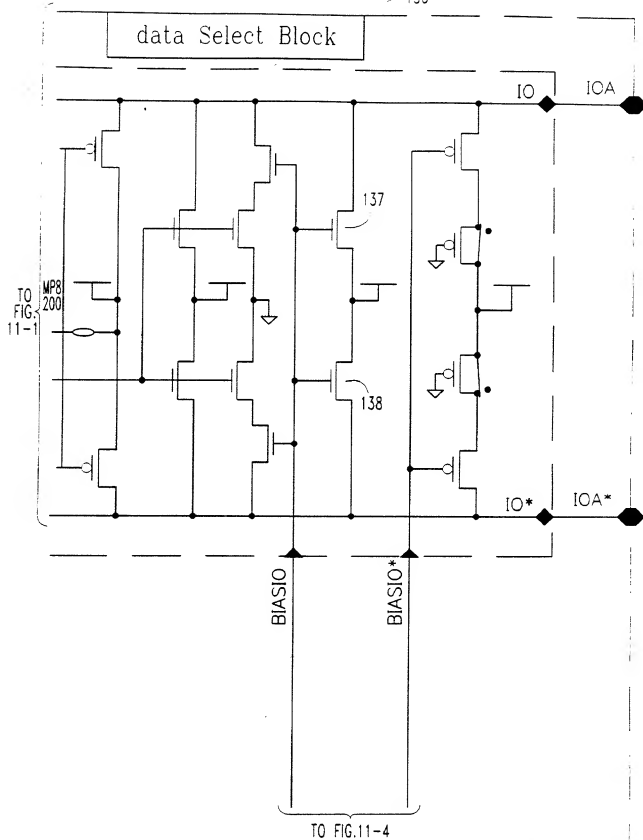
0989977-070001

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FIG. 11-1





TOP SECRET

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TO FIG.11-1

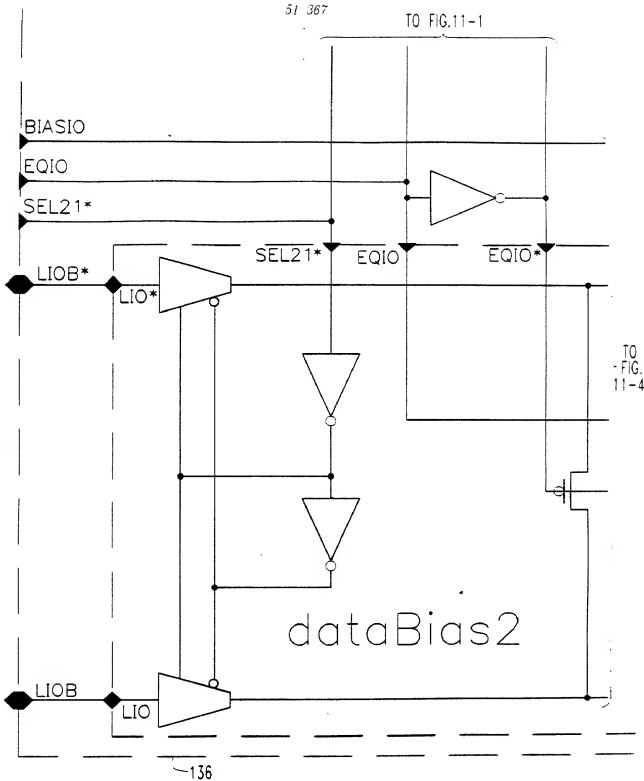


FIG. 11-3

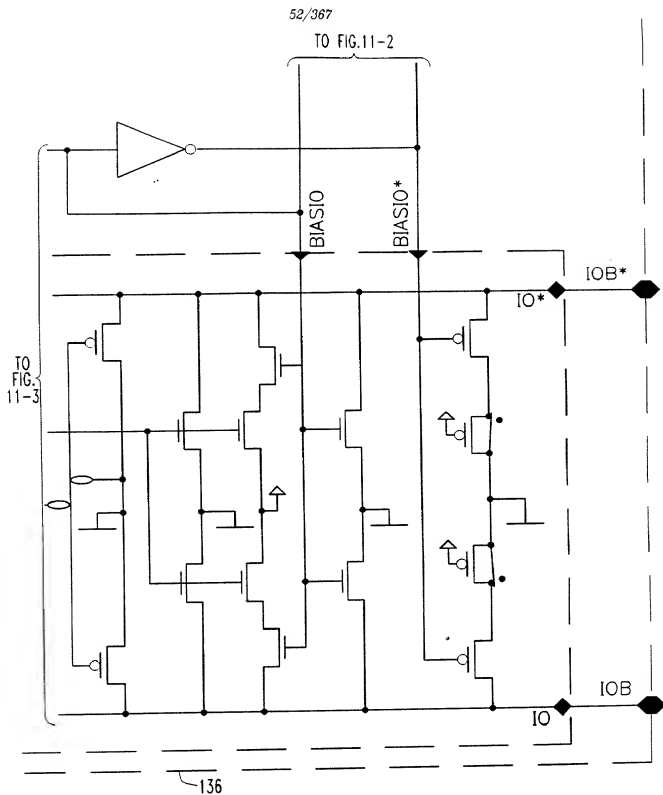


FIG. 11-4

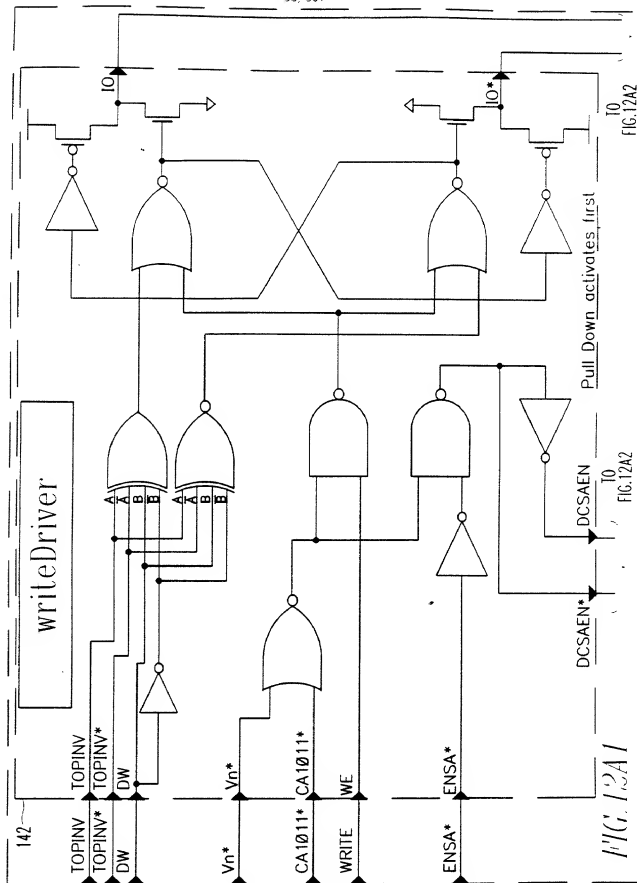
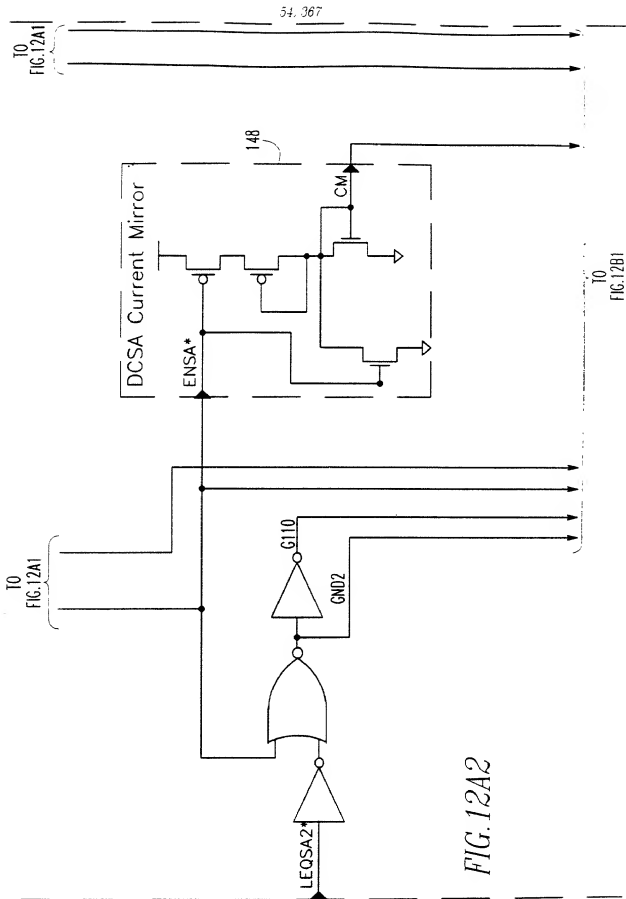
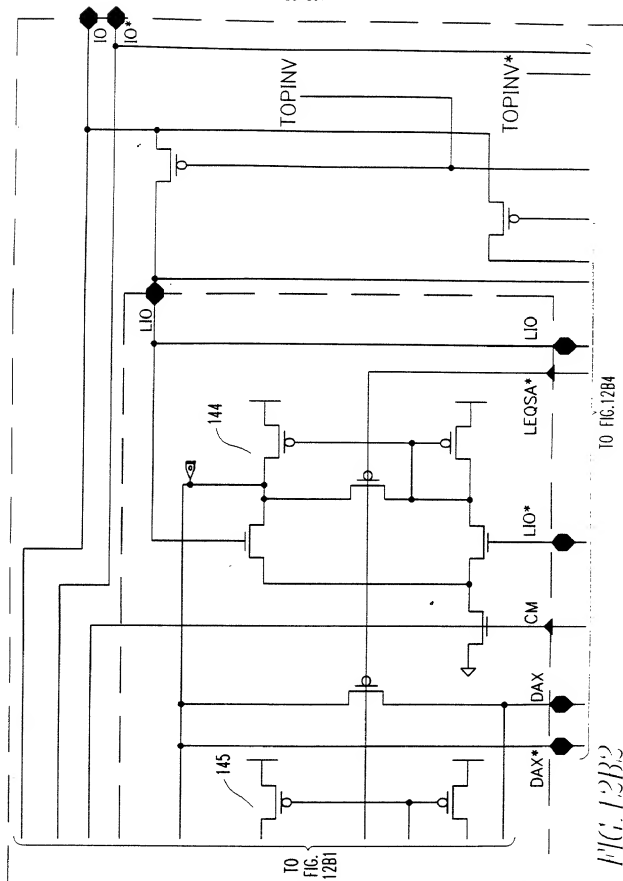


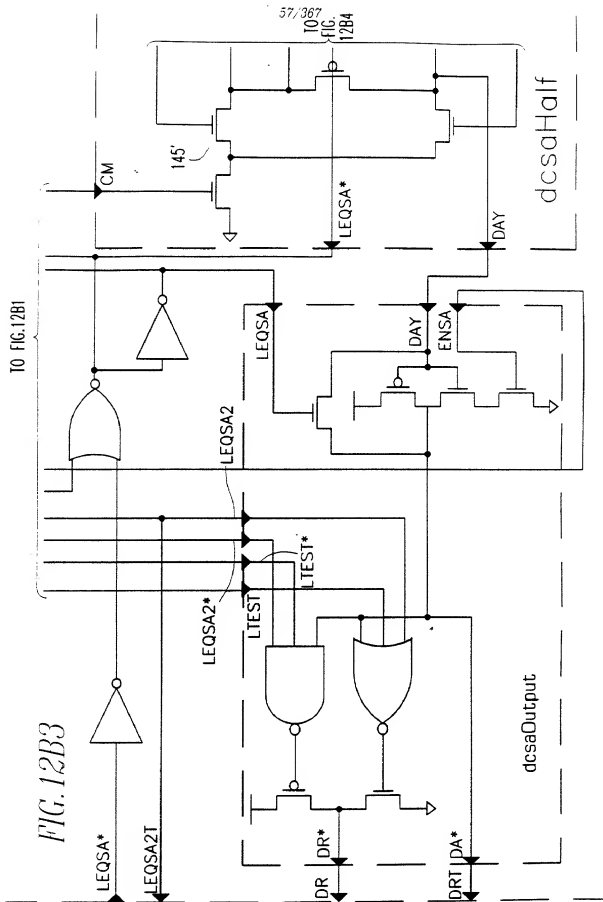
FIG. 12A

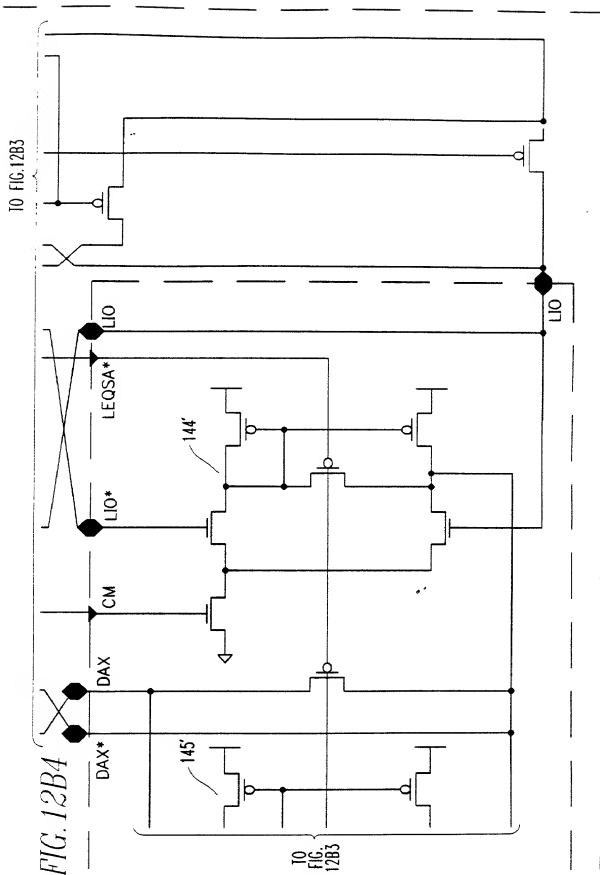
FIG. 12A2

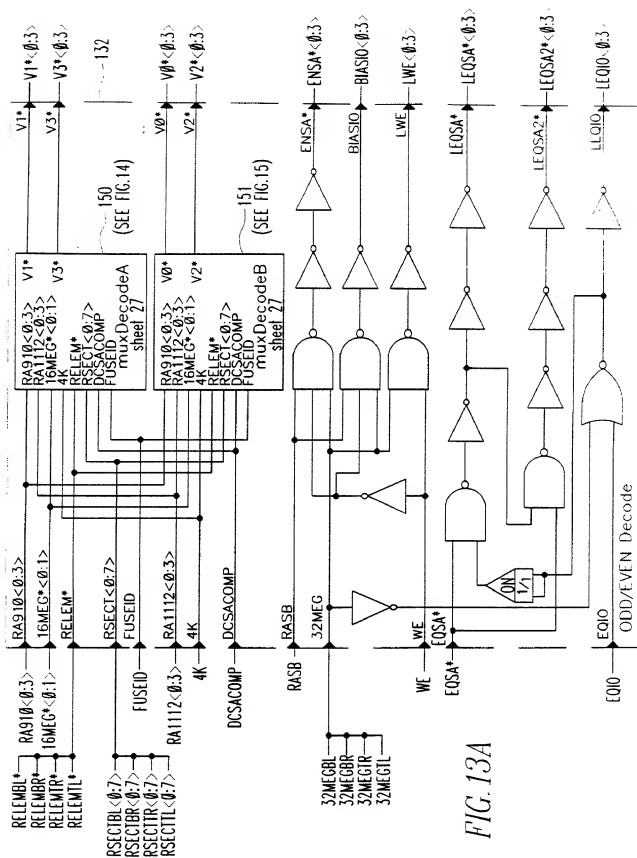
FIG. 12A2











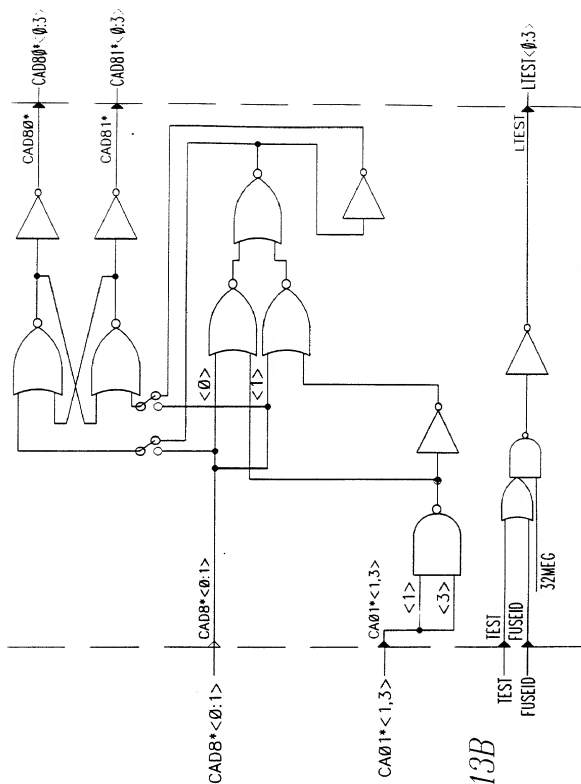


FIG. 13B

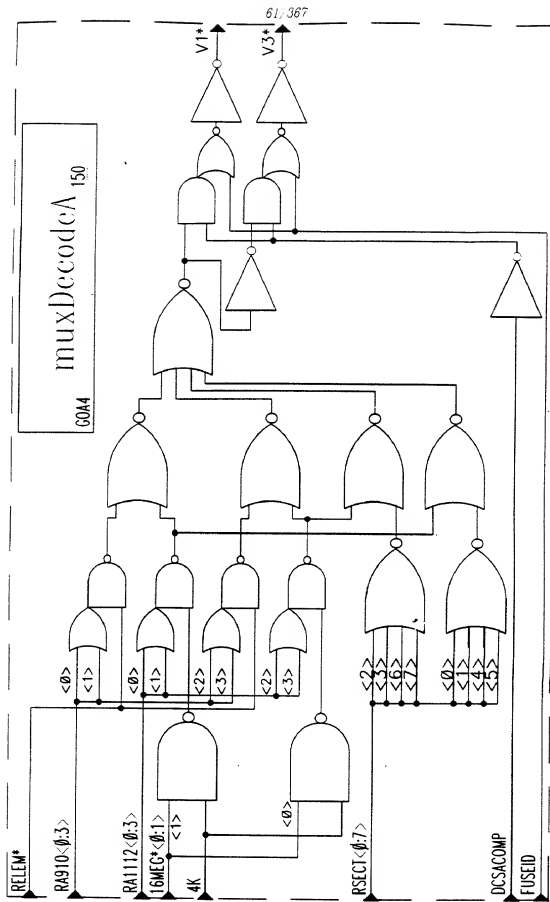
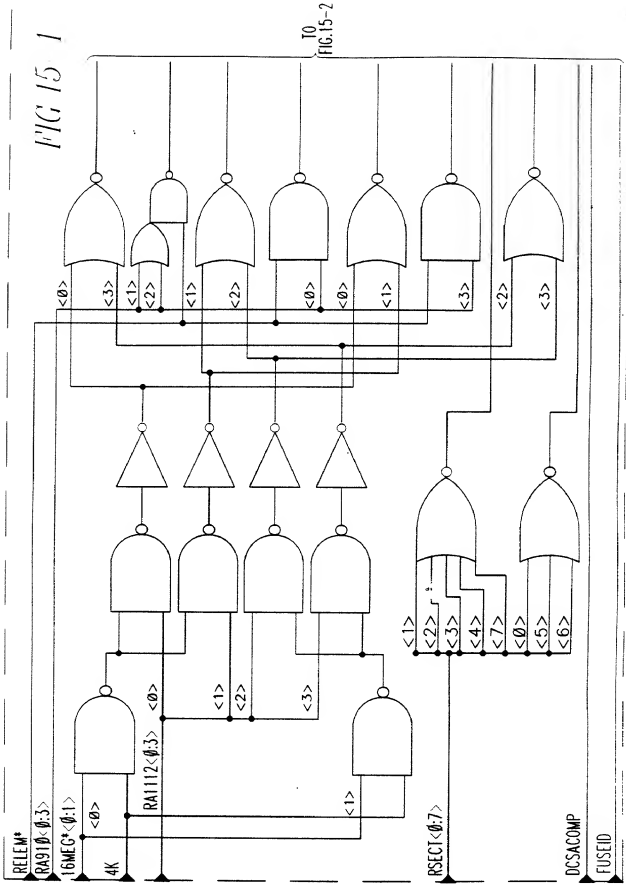


FIG. 11



muxDecodeB

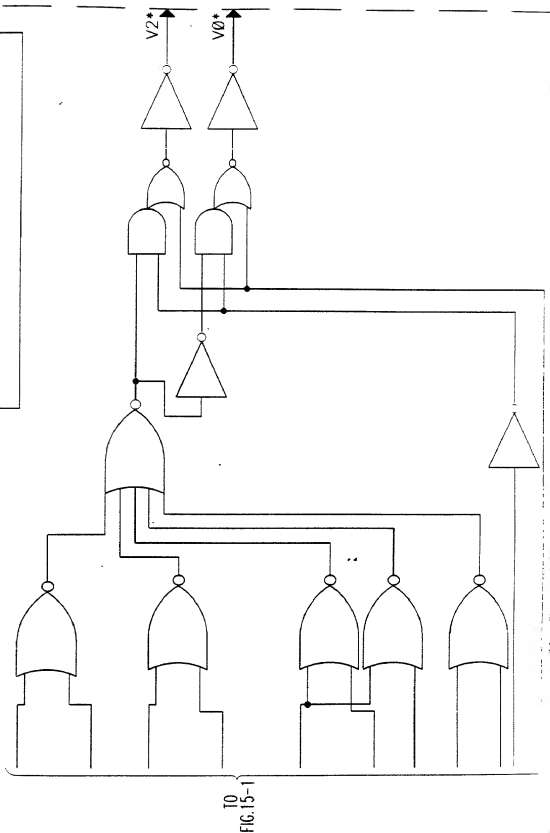
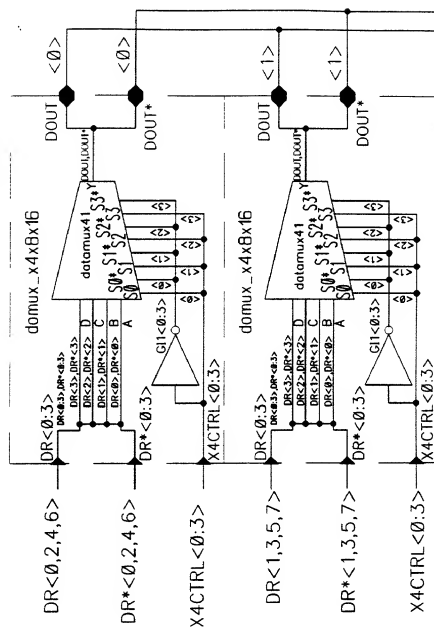
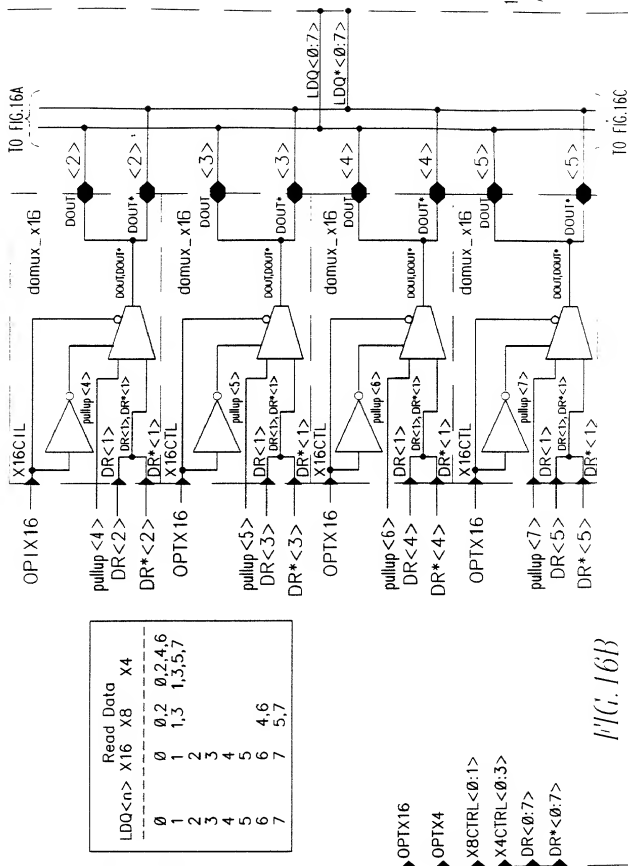


FIG. 16A





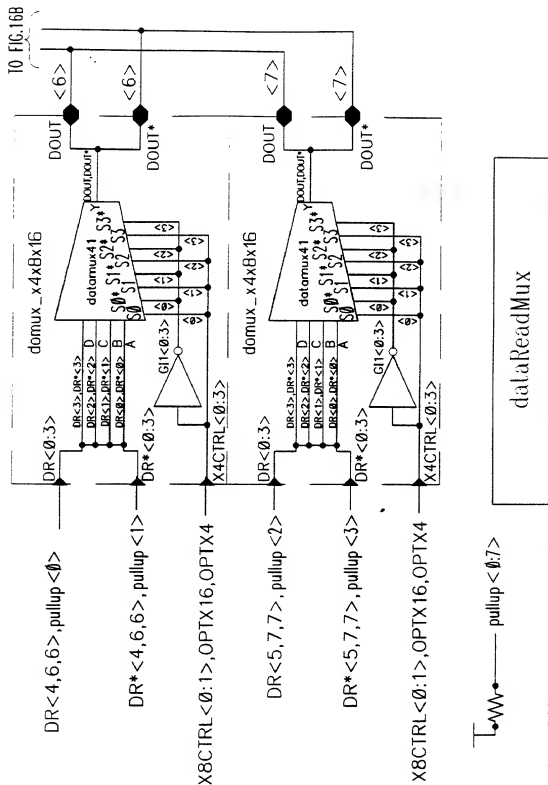
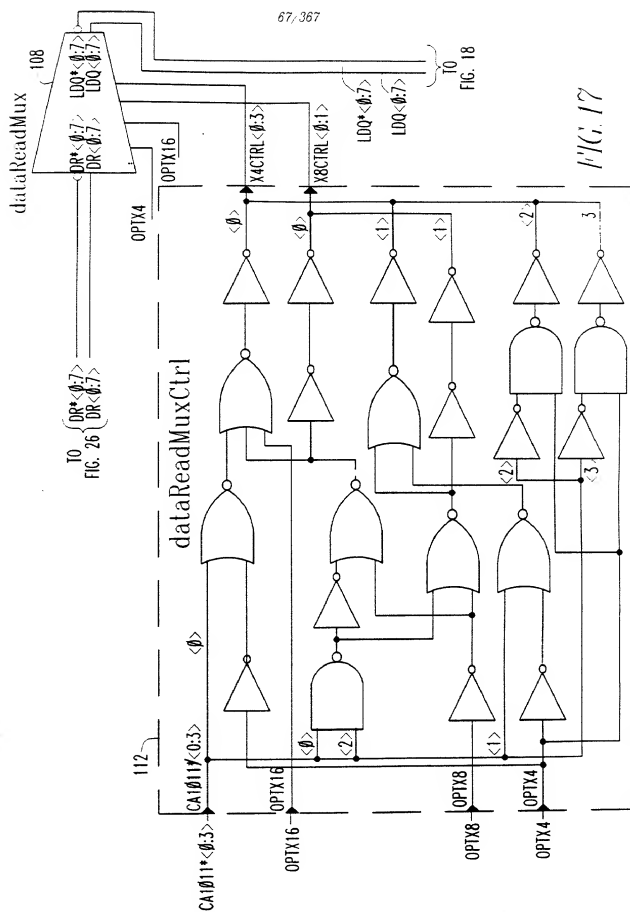
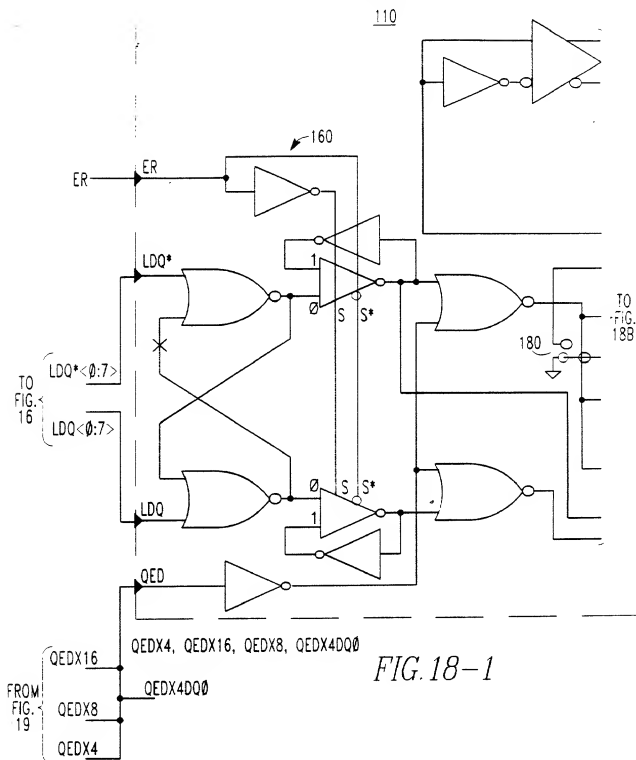


FIG. 16C



DATA OUTPUT BUFFER



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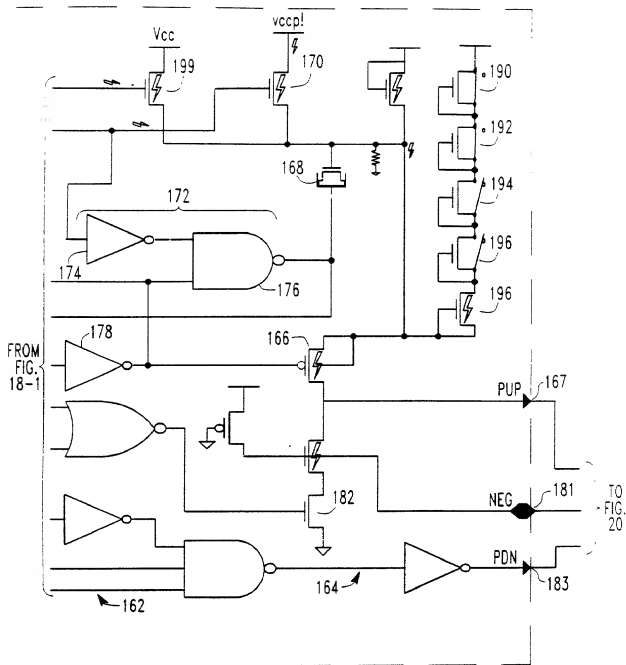


FIG. 18-2

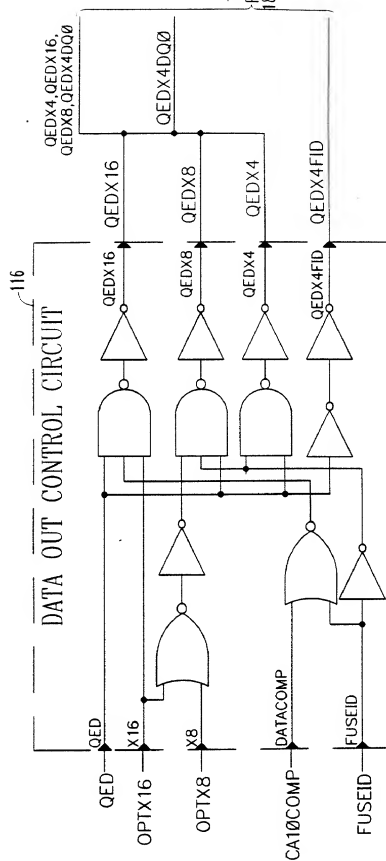
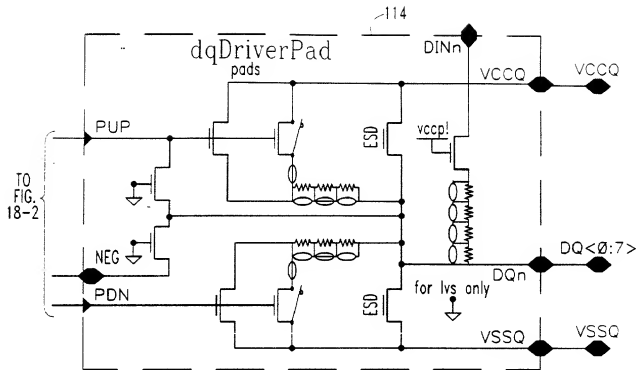


FIG. 19



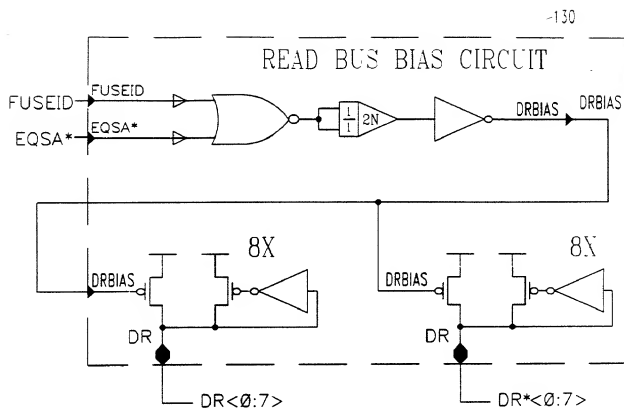


FIG. 21

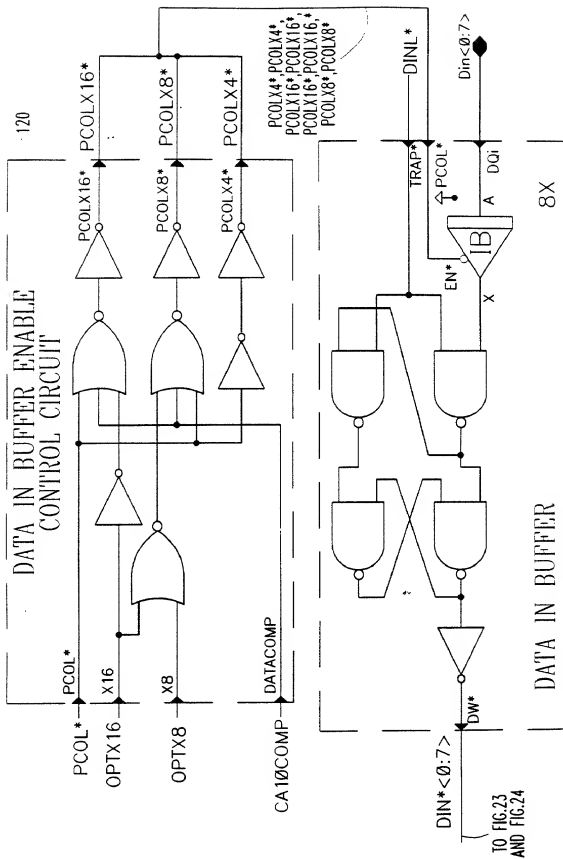
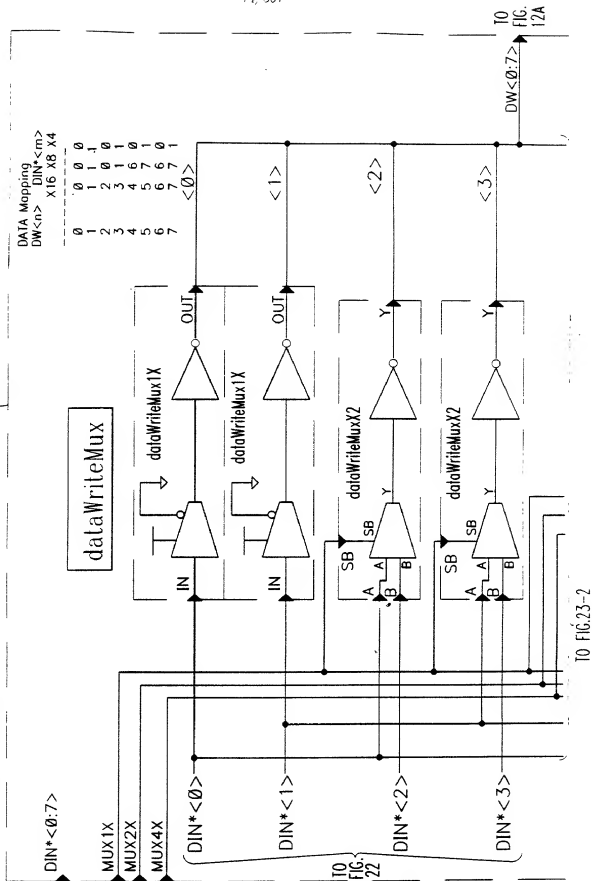


FIG. 22

TO FIG. 23
AND FIG. 24

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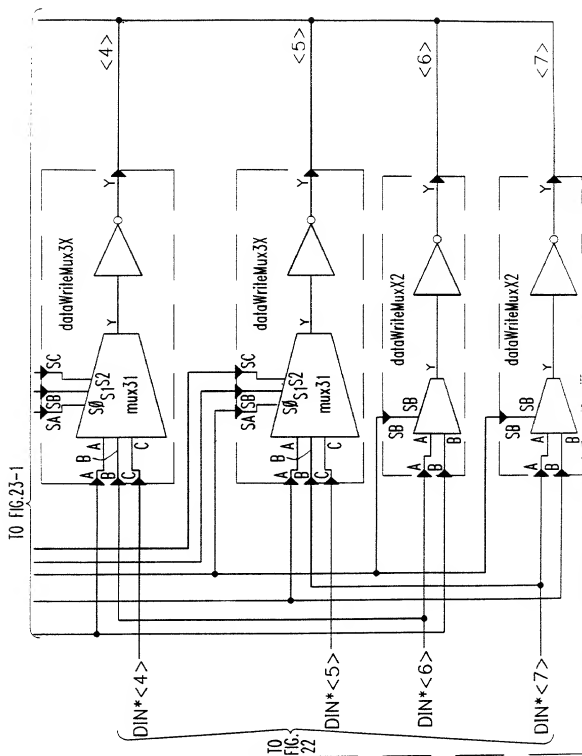


FIG. 23-2

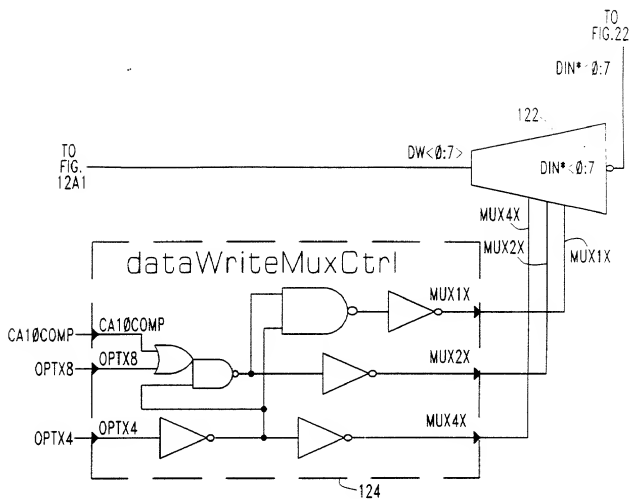


FIG. 24

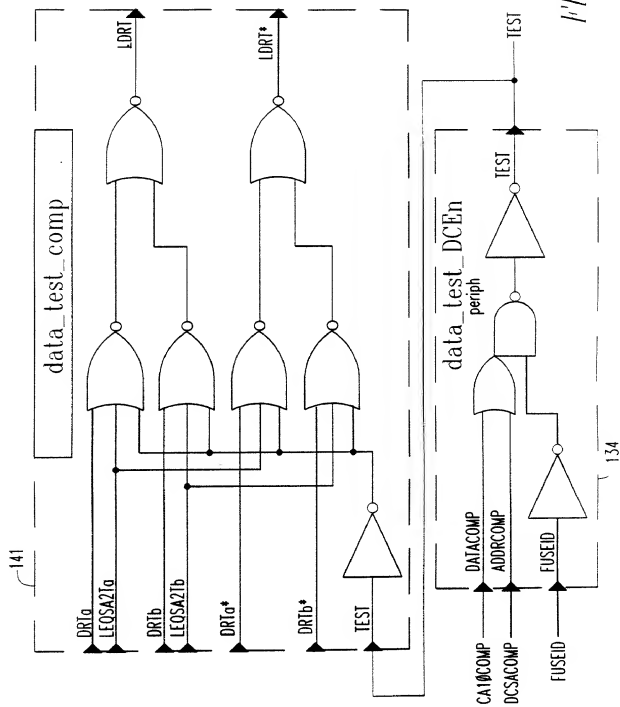


FIG. 25

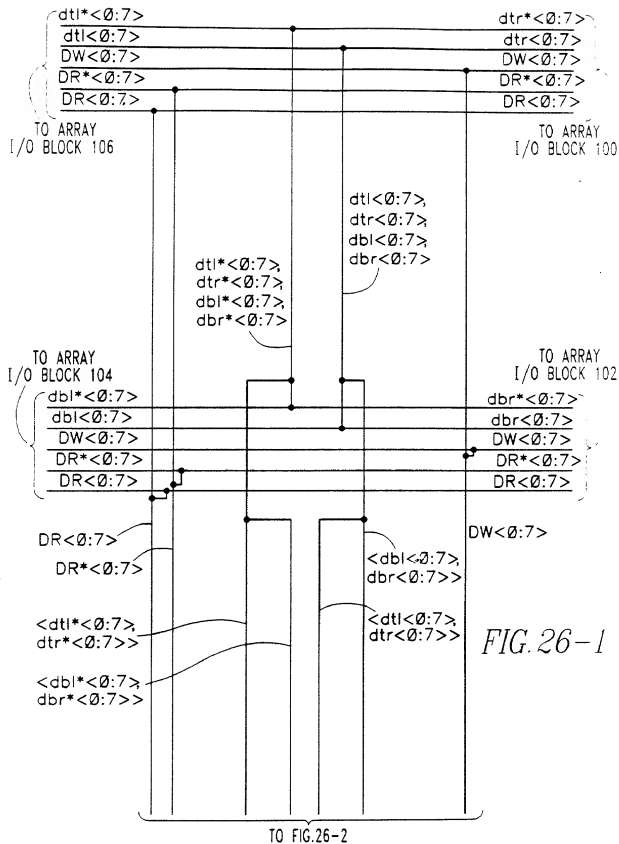


FIG.26-1

FROM FIG. 26-1

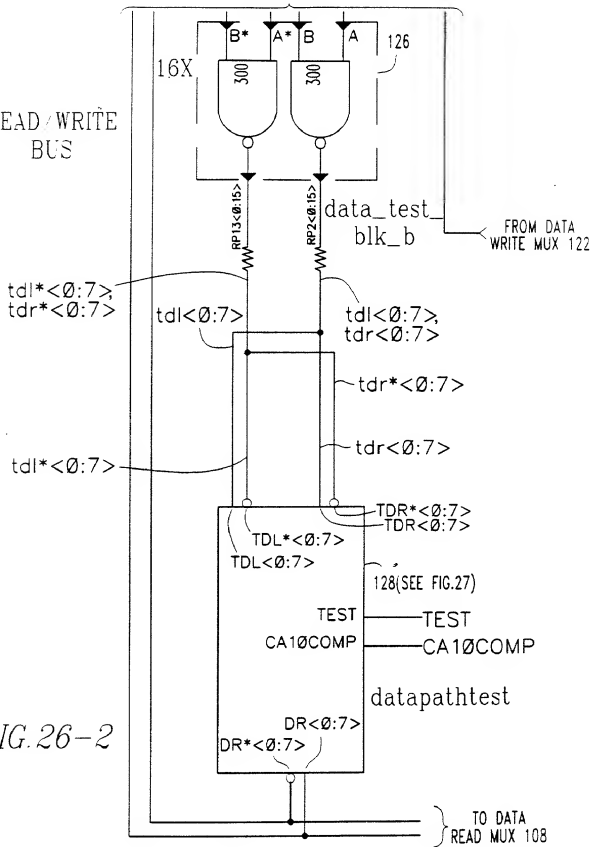
READ/WRITE
BUS

FIG. 26-2

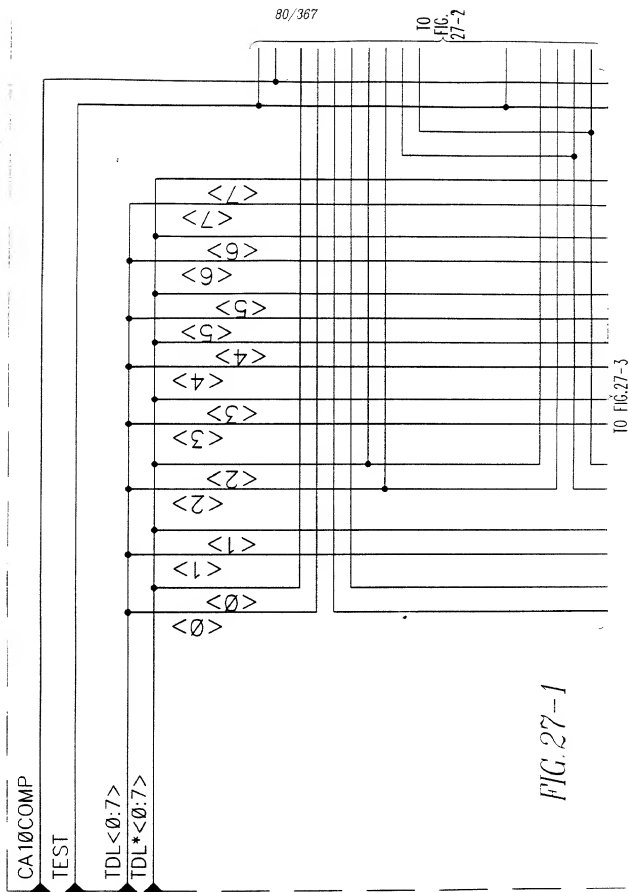


FIG. 27-1

dataPathTest
Block 128

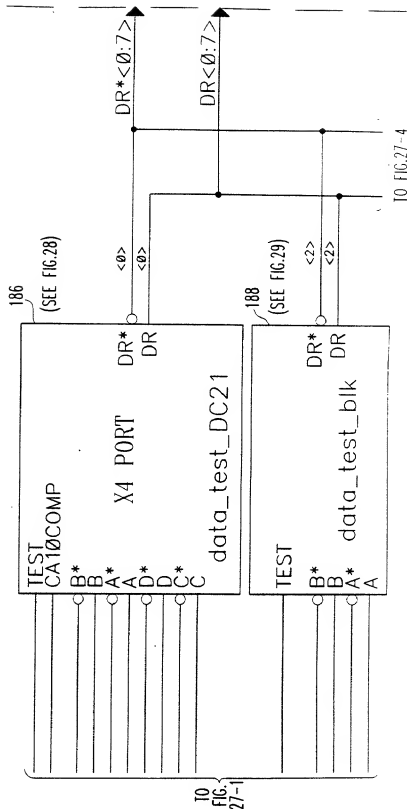


FIG. 27-4

FIG. 27-1

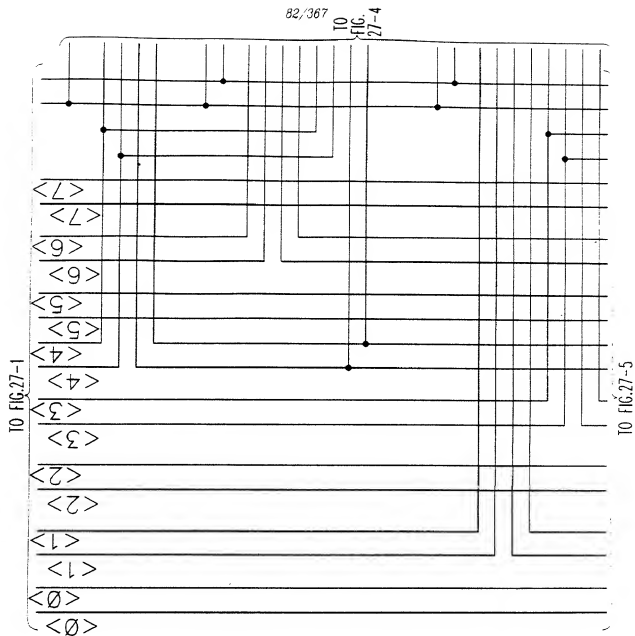
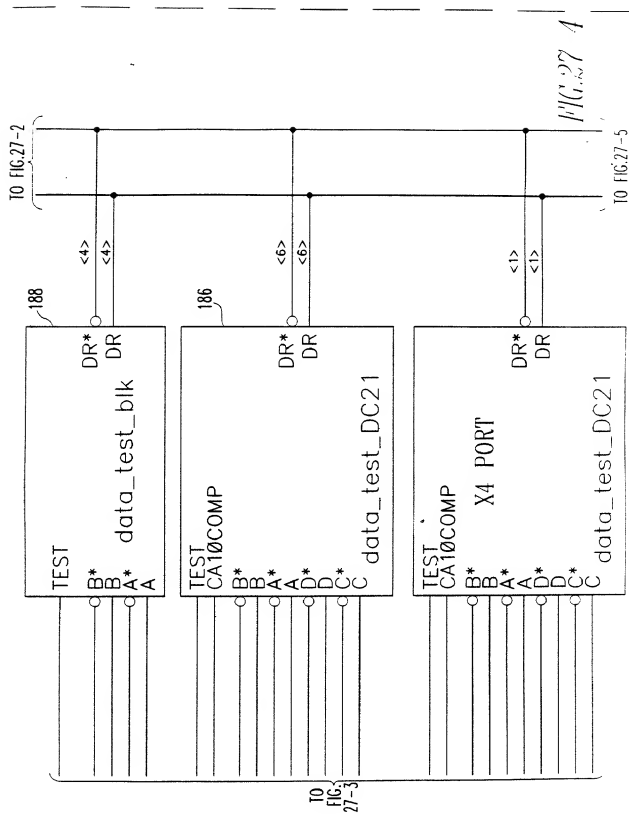
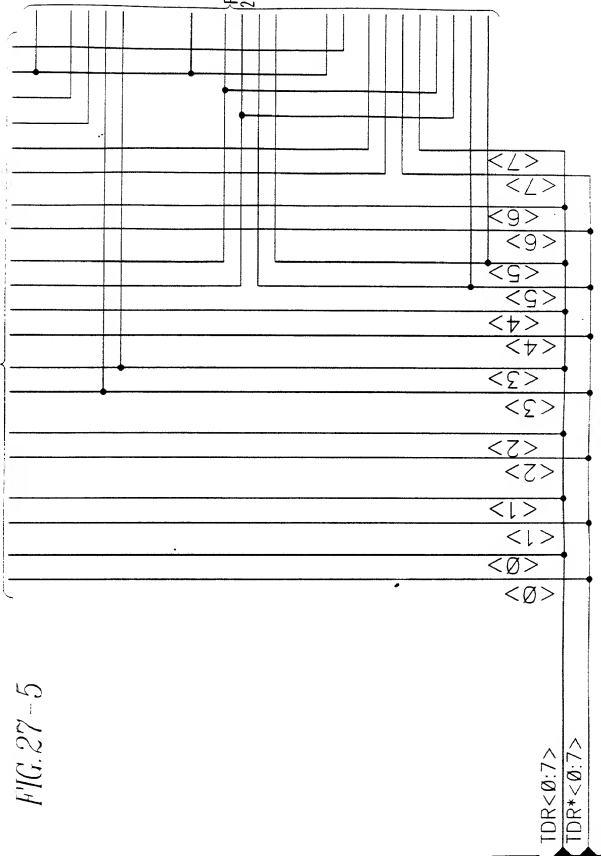


FIG. 27-3



10 FIG. 27-3



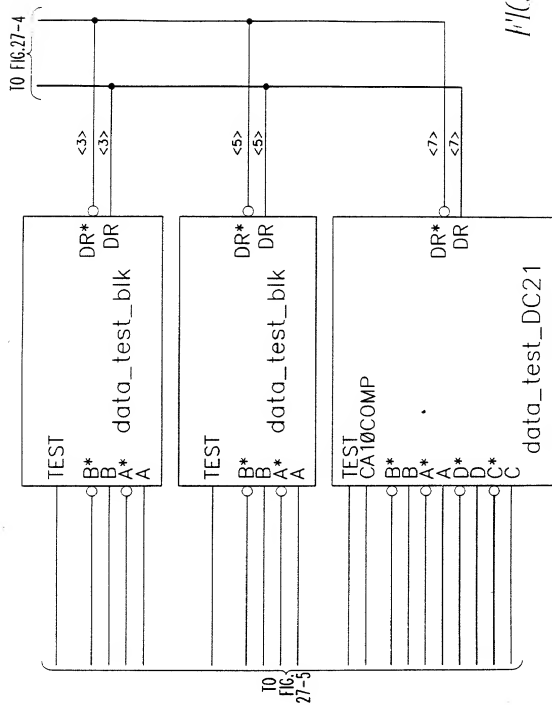


FIG 27-6

data_test_DC21
(X8 PART)

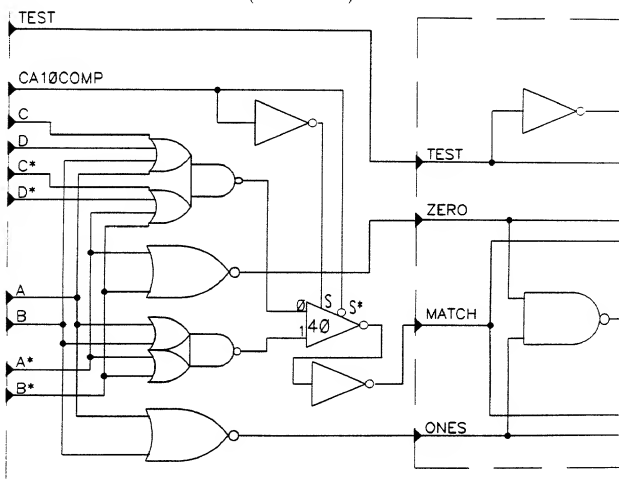


FIG. 28-1

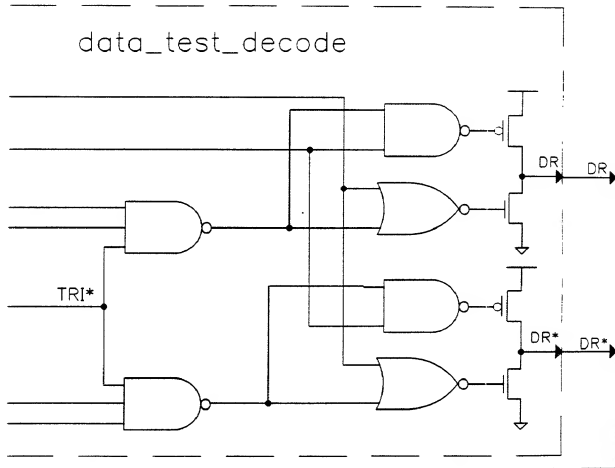


FIG. 28-2

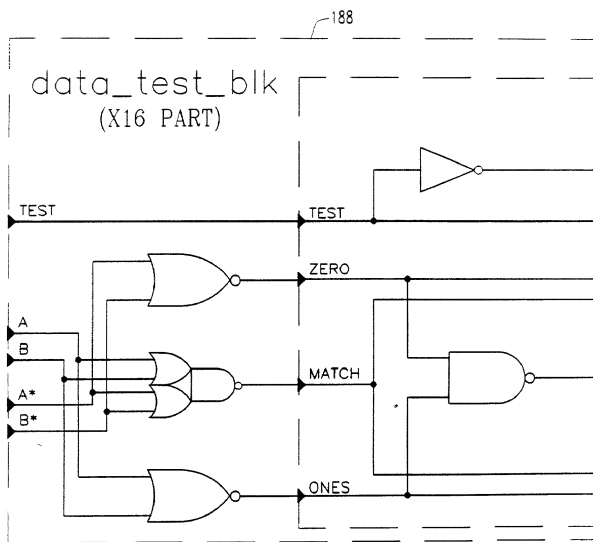


FIG. 29-1

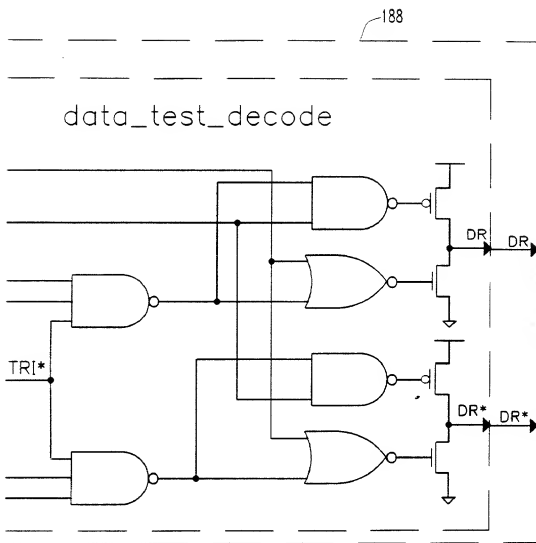
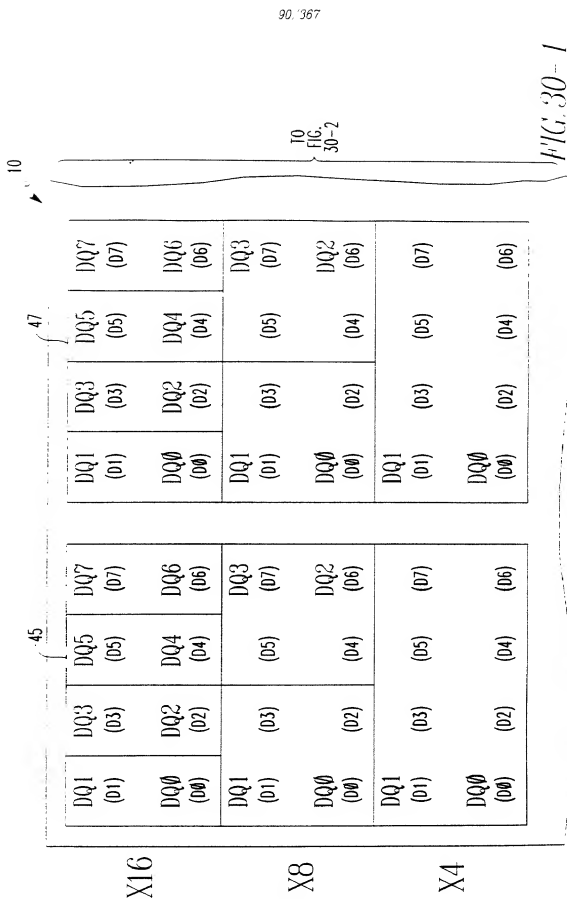
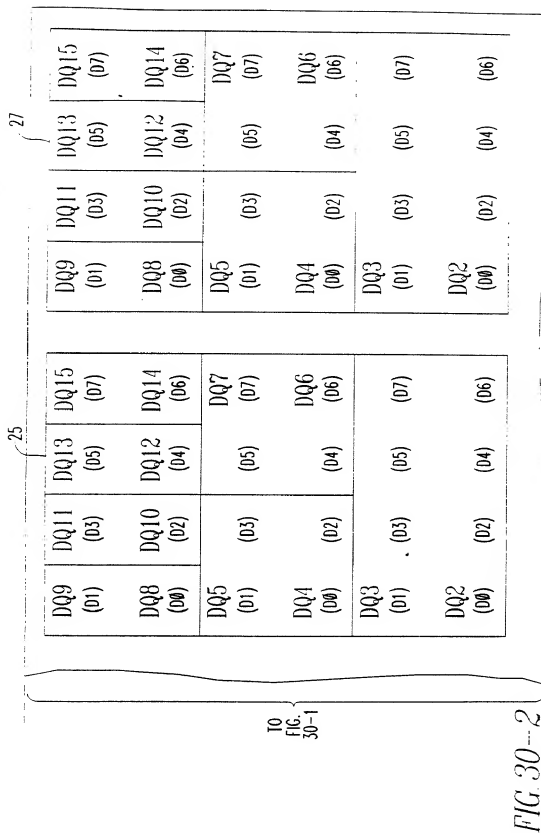


FIG. 29-2



10 FIG. 30-3



TO FIG. 30-1

	38			40		
	(00) DQ0	(02) DQ1	(04) DQ2	(06) DQ3	(07) DQ4	(08) DQ5
X4	(00) DQ0	(02) DQ1	(04) DQ2	(06) DQ3	(07) DQ4	(08) DQ5
X8	(00) DQ0	(02) DQ1	(04) DQ2	(06) DQ3	(07) DQ4	(08) DQ5
X16	(00) DQ0	(02) DQ1	(04) DQ2	(06) DQ3	(07) DQ4	(08) DQ5

TO
FIG.
30-4

FIG. 30 3

10 FIG. 30-2

31			33		
(00) DQ2	(02)	(04)	(06)	(02)	(04)
(01) DQ3	(03)	(05)	(07)	(03)	(05)
(00) DQ4	(02)	(04)	(06)	(02)	(04)
(01) DQ5	(03)	(05)	(07)	(03)	(05)
(00) DQ8	(02)	(04)	(06)	(02)	(04)
(01) DQ9	(03)	(05)	(07)	(03)	(05)

10
FIG.
30-3

FIG. 30-1

X4	VSSQ	N/C	VSSQ	N/C	N/C						
X8	VSSQ	DQ3	VSSQ	DQ2	N/C						
X16	VSSQ	DQ7	VSSQ	DQ6	DQ5						
	1	2	3	4	5	6	7	8	9	10	11
X16	VCCQ	DQ0	VCCQ	DQ1	VCCQ	DQ2	VCCQ				
X8	VCCQ	DQ0	VCCQ	DQ1	VCCQ	DQ1	N/C	N/C			
X4	VCCQ	DQ0	VCCQ	DQ1	VCCQ	DQ1	N/C	N/C			

TO FIG. 31A2

FIG. 31A1

TO FIG. 31B1
↓

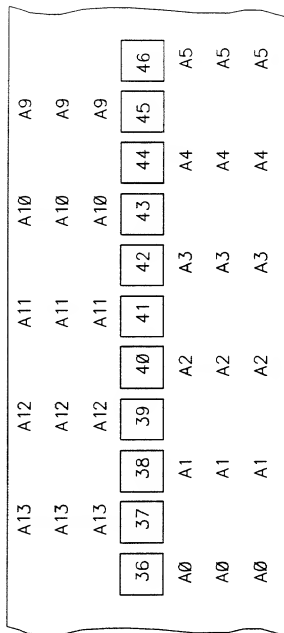
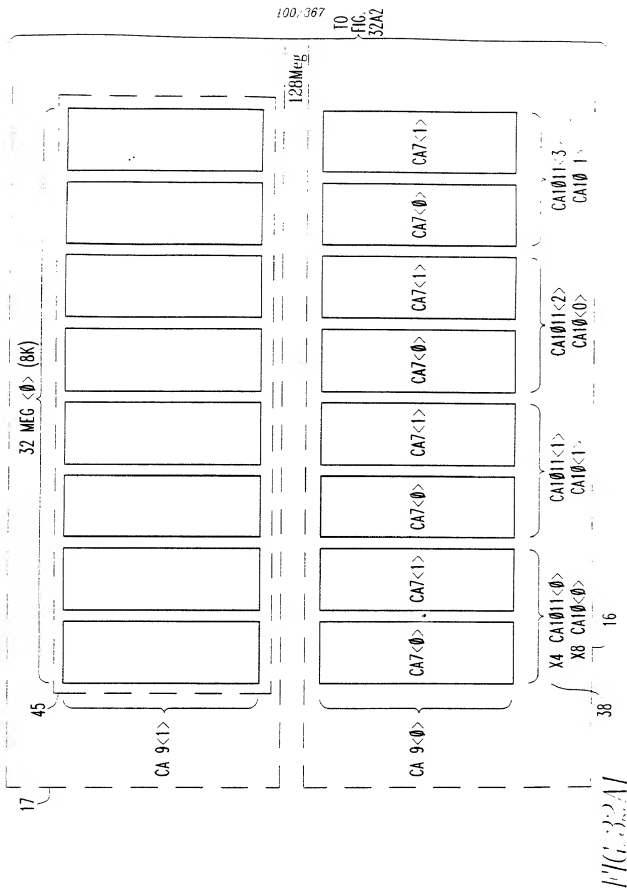


FIG. 31B2

TO FIG. 31C2

FIG. 31C1



32 MEG <1> (8K)

47

PART TYPE	32MEG
ANY 16K	RA 13
X4 8K OR 4K	CA 12
X8 8K OR 4K	CA 11
X16 8K OR 4K	CA 10

FROM
FIG.
32A1

101-367

TO
FIG.
32A3

FIG. 32A2

CA 6-0:1 > MSB
CA45-0:3 >
CA23-0:3 >
CA01-0:3 >
CA 8 0:1 > LSB

40

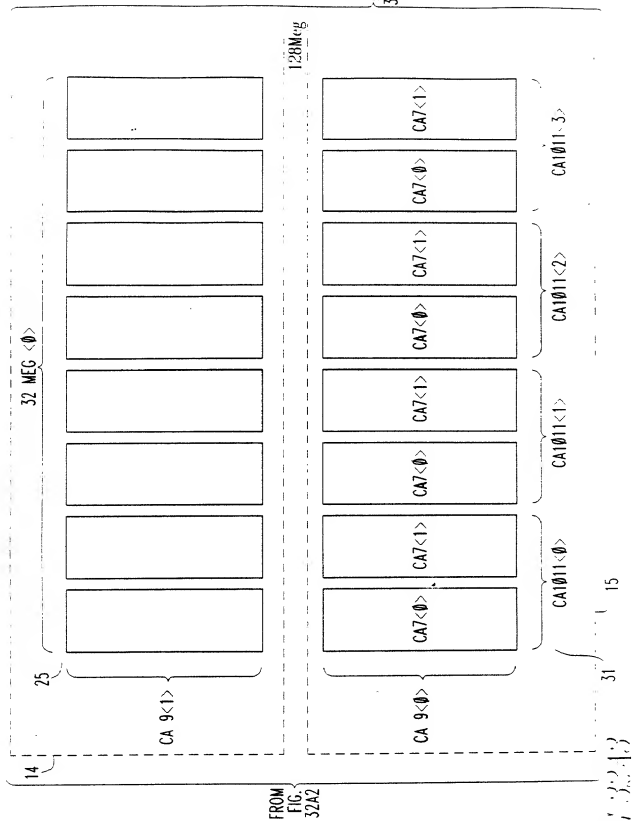


FIG. 32A4

109020-2666860

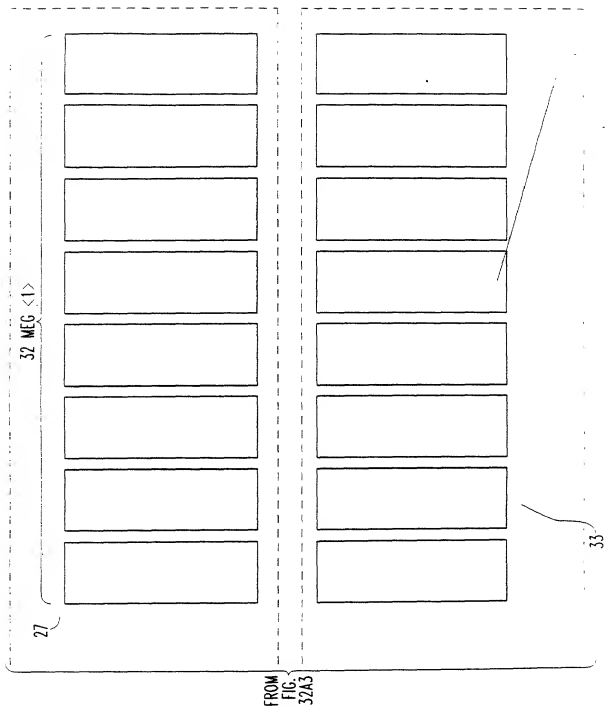


FIG. 32A4

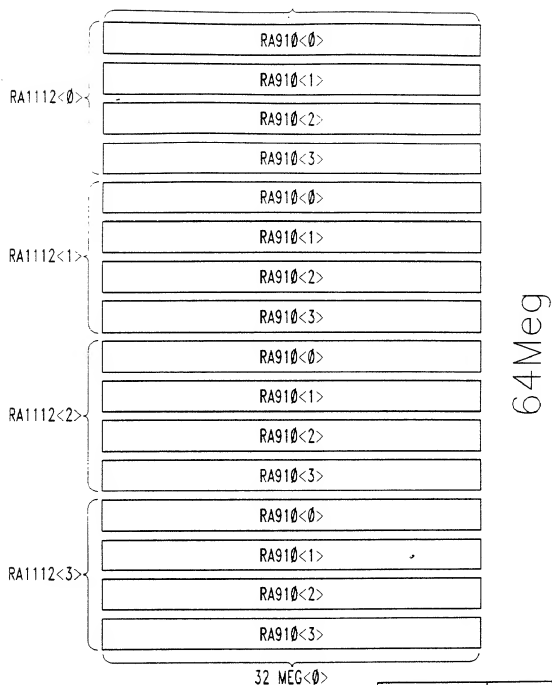


FIG. 32B1

PART TYPE	32MEG
ANY 16K	RA_13
X4 8K OR 4K	CA_12
X8 8K OR 4K	CA_11
X16 8K OR 4K	CA_10

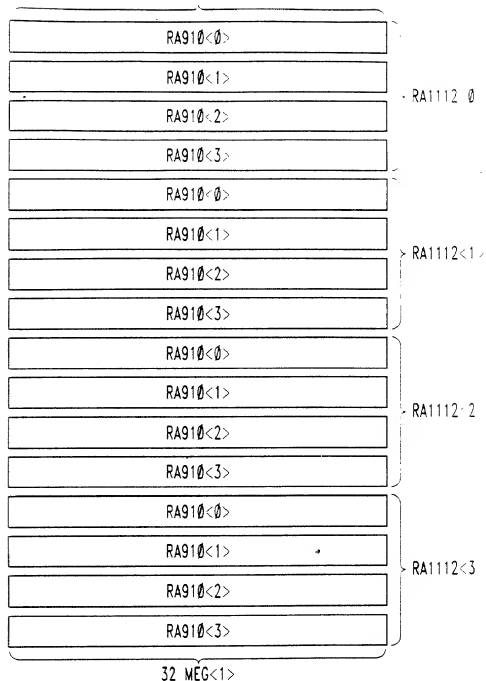
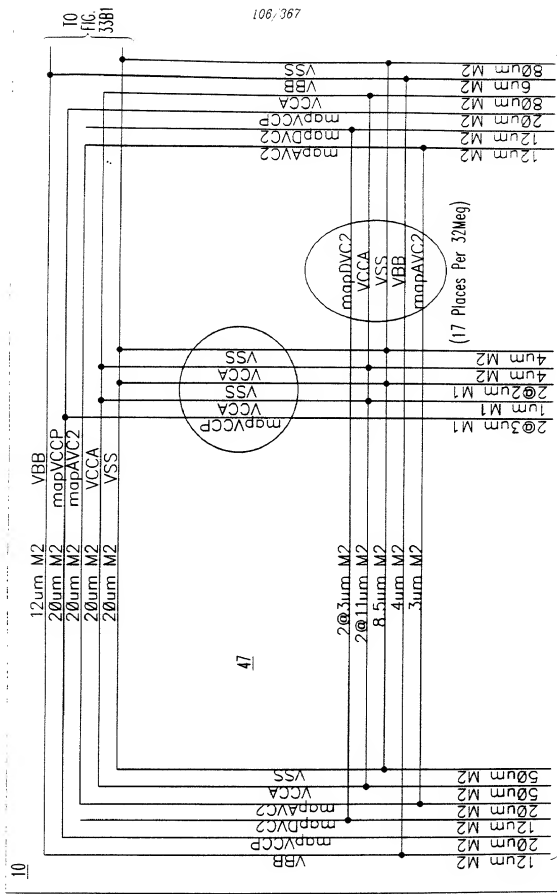


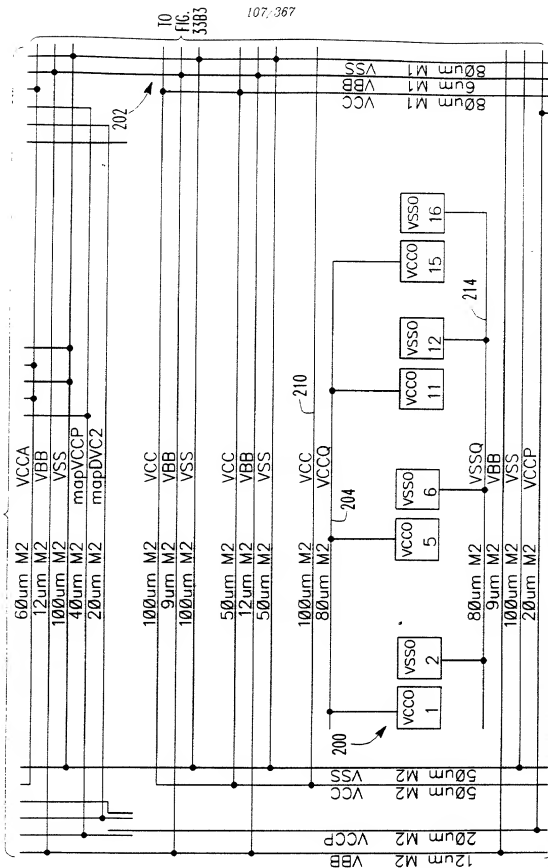
FIG. 32B2



TO FIG. 33A2

1163311

FROM FIG. 33A1



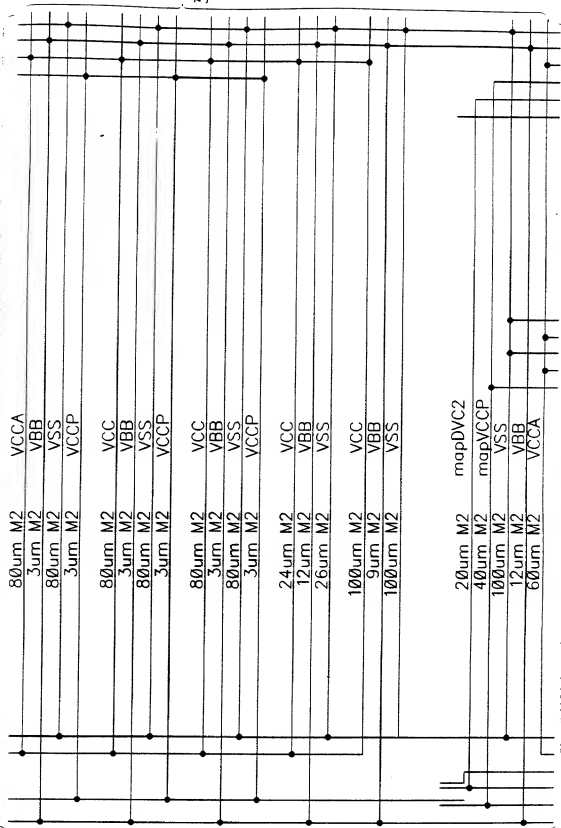
TO FIG. 33A3

FIG. 33A2

TO
FIG.
33B3

107,367

FROM FIG. 33A2

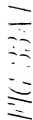


TO
FIG.
33B5

108,367

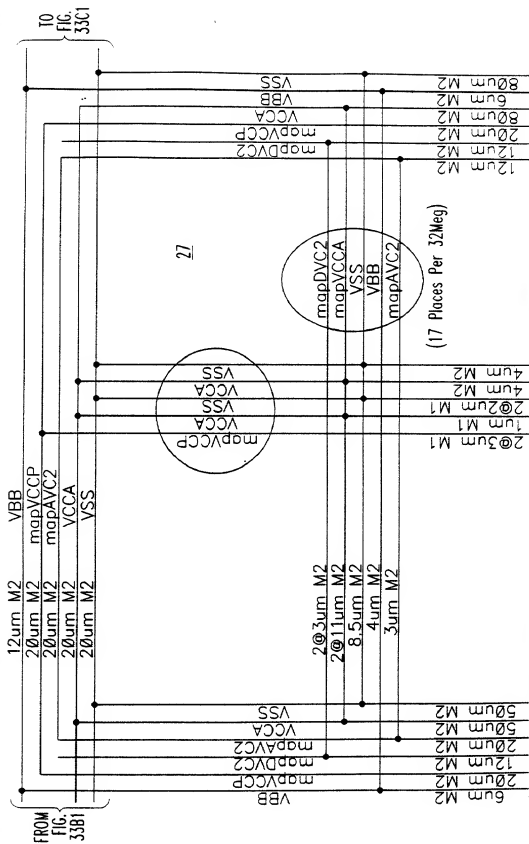
TO FIG. 33A4

FIG. 33A3





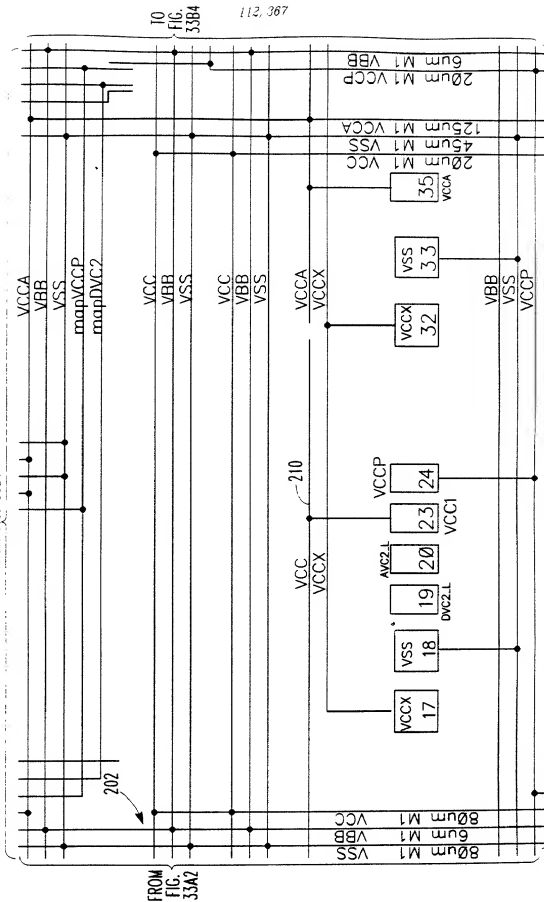
KG 2013



TO FIG. 33B4

FIG. 33B2

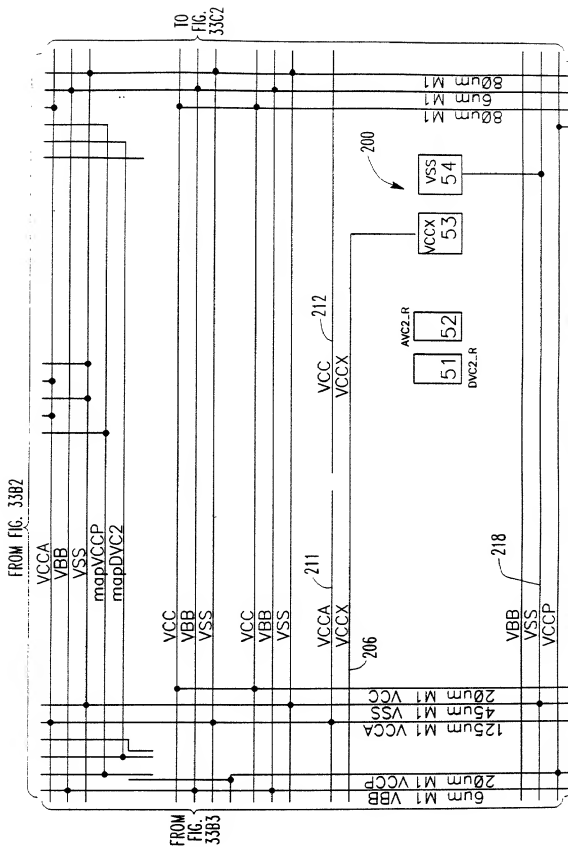
FROM FIG. 33B1



TO FIG. 33B3

FIG. 33B3

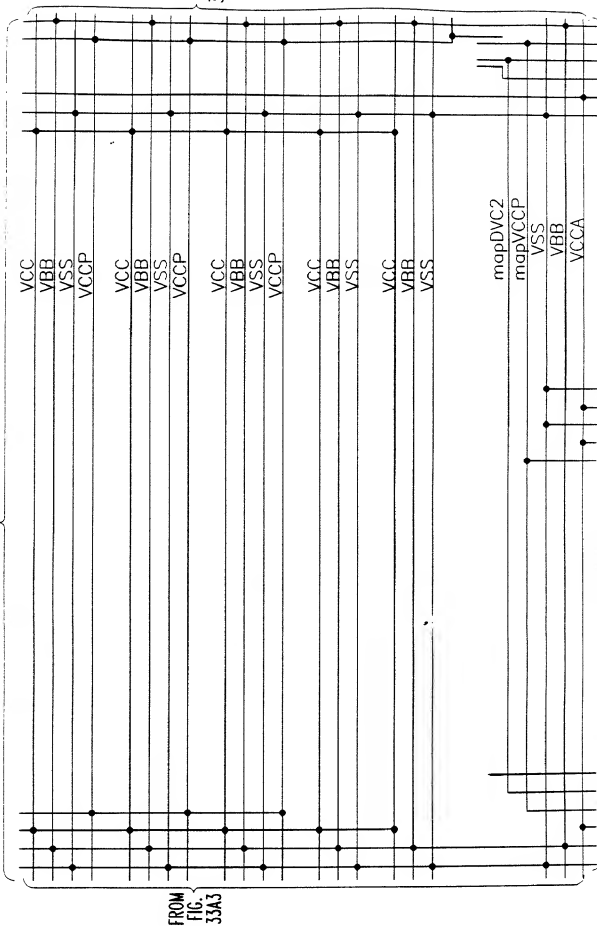
TO FIG. 33B4 112, 367



TO FIG. 33B6

FIG. 33B1

FROM FIG. 3383



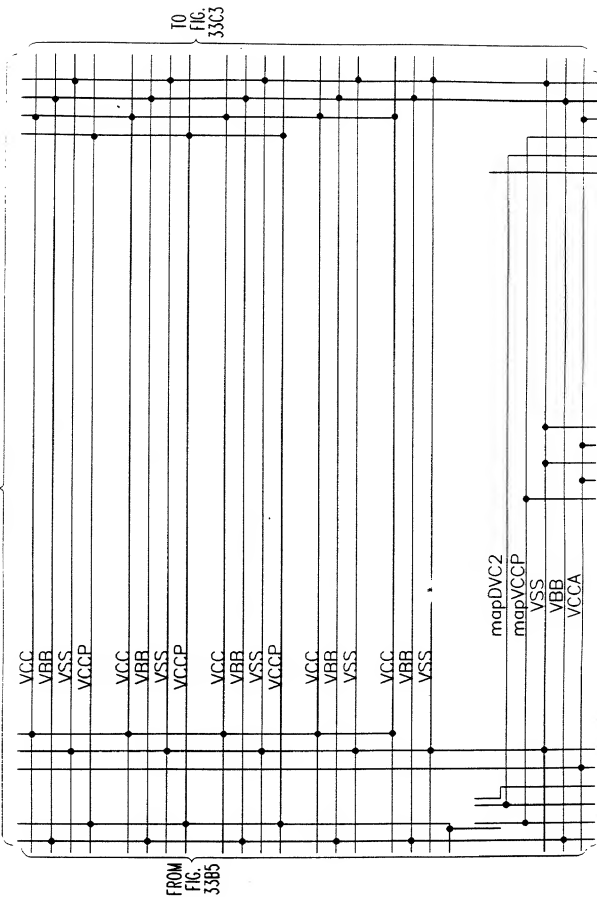
TO
FIG.
3386

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TO FIG. 3387

FIG. 3385

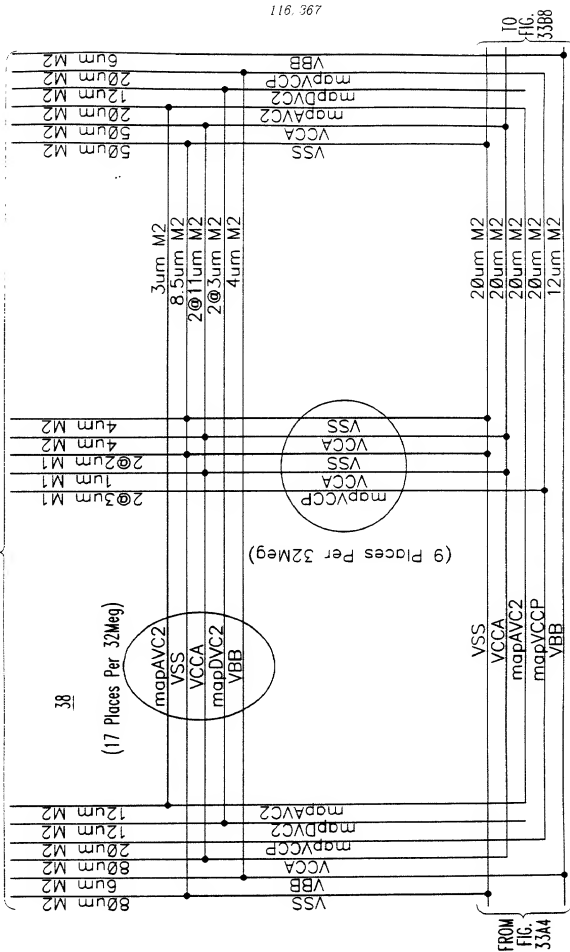
FROM FIG. 33B4

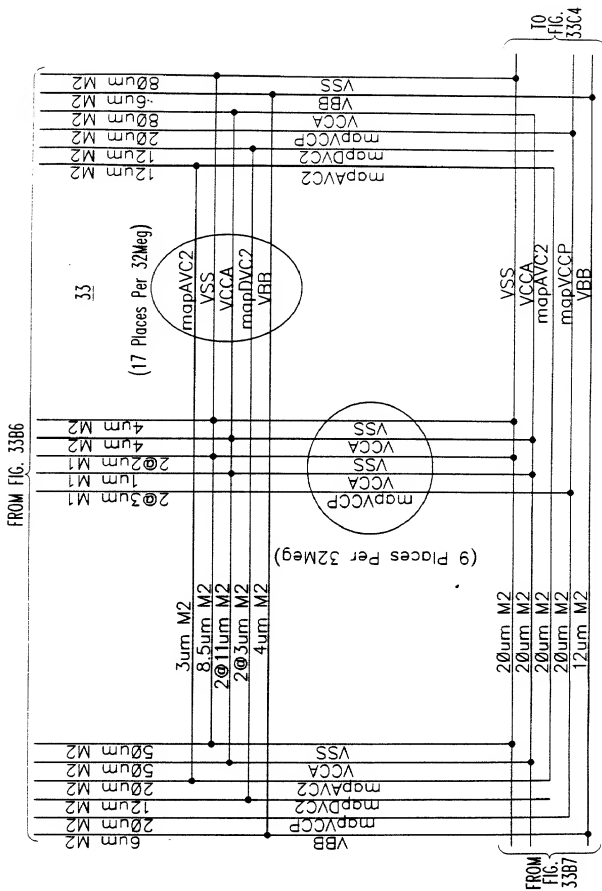


TO FIG. 33B8

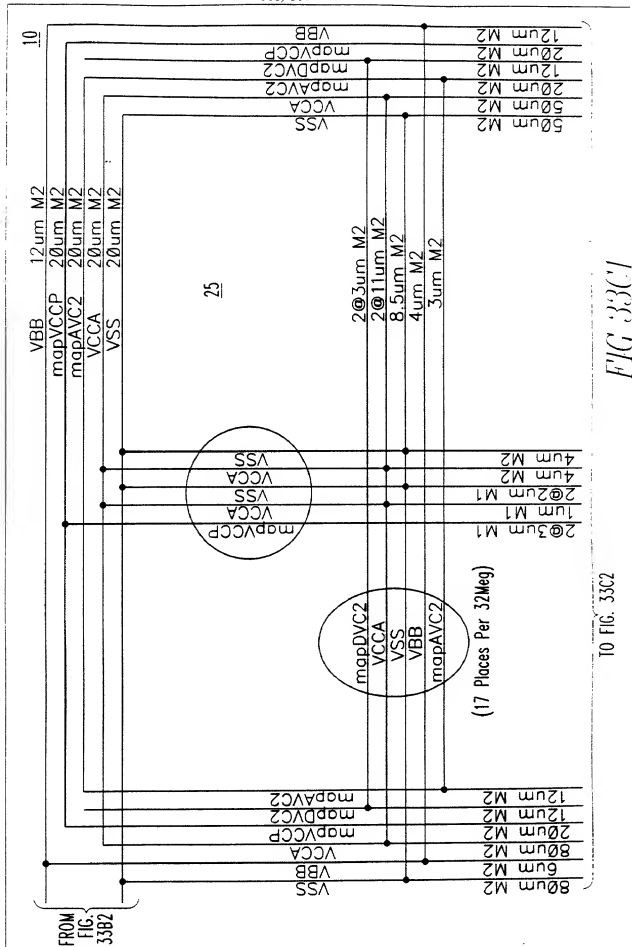
FIG. 33B6

FROM FIG. 33B5



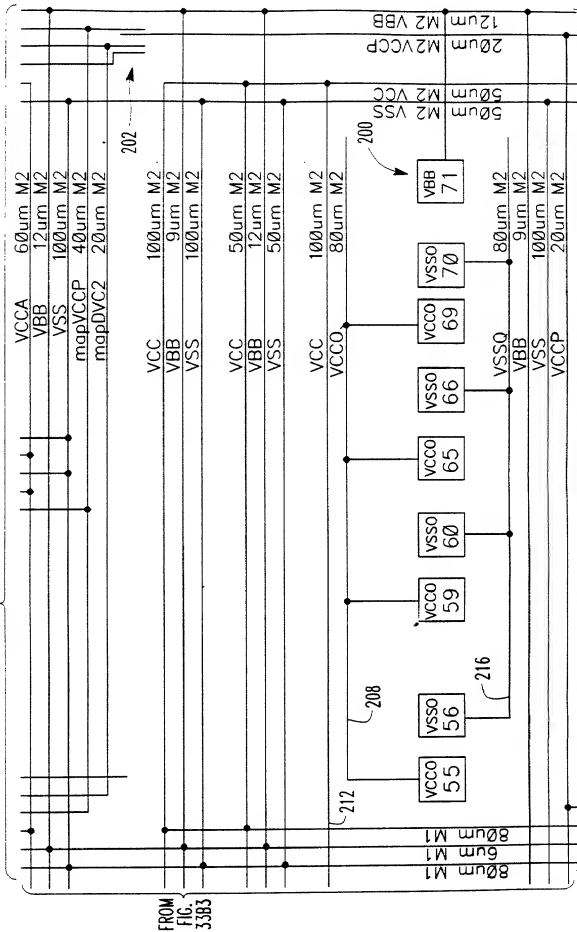


176.3338



10 FIG. 33C2

FROM FIG. 33C1

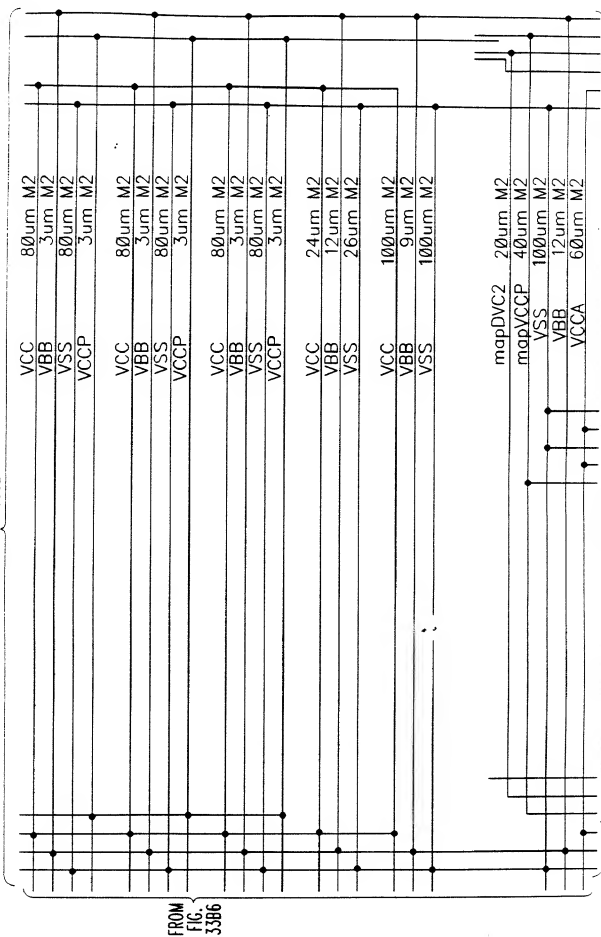


FROM
FIG.
33B3

TO FIG. 33C3

FIG. 33C2

FROM FIG. 33C2

FROM
FIG.
33B6

TO FIG. 33C4

FIG. 33C3

FROM FIG. 33C3

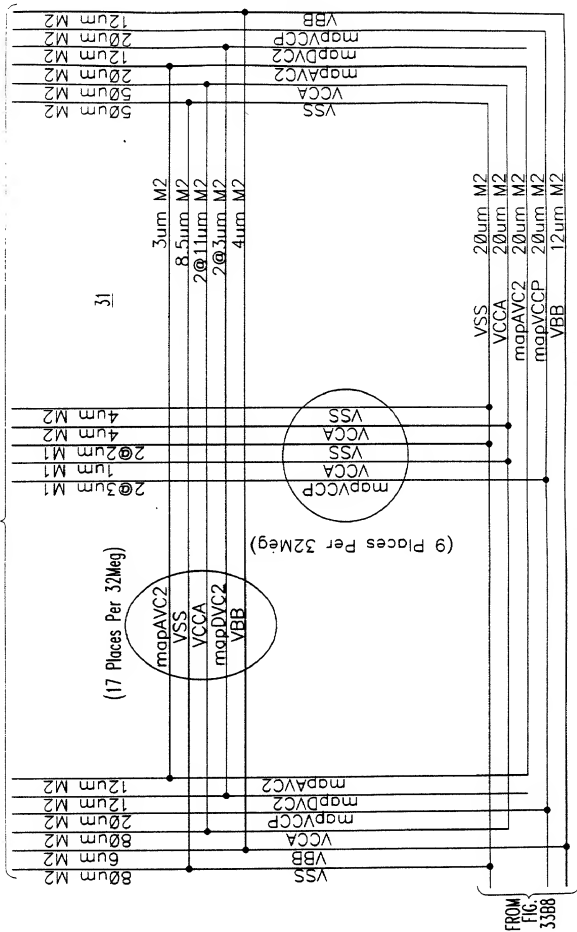


FIG. 33C3

10

45

200

DVC2
GENERATOR 500

□ □ □ □ □ □ □ □ □ □

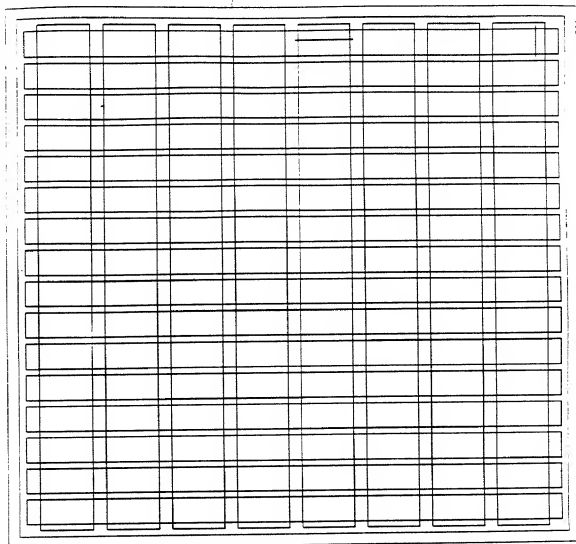
□ □ □ □ □ □ □ □ □ □

VCCP
PUMP CIRCUITS 402DVC2
GENERATOR 501TO
FIG.
33D3

TO FIG. 33D2

FIG. 33D1

TO FIG. 33D1



502 DVC2
GENERATOR



401 VCCP
PUMP CONTROL

503 DVC2
GENERATOR

TO
FIG.
33D4

FIG. 33D2

TO
FIG.
33D1

(SEE FIG. 33E1)

0989977.070601

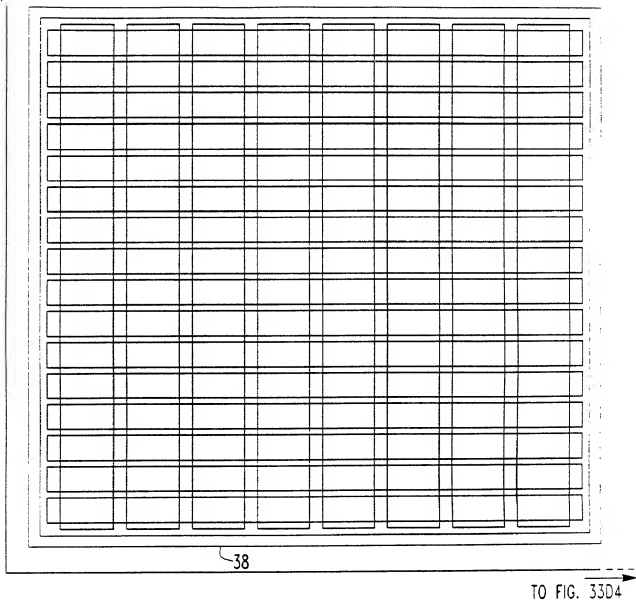
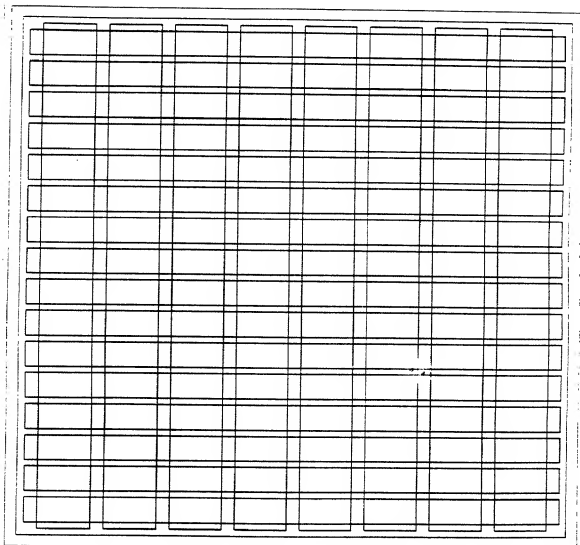


FIG. 33D3

TO
FIG.
33D2

40

TO FIG. 33D3

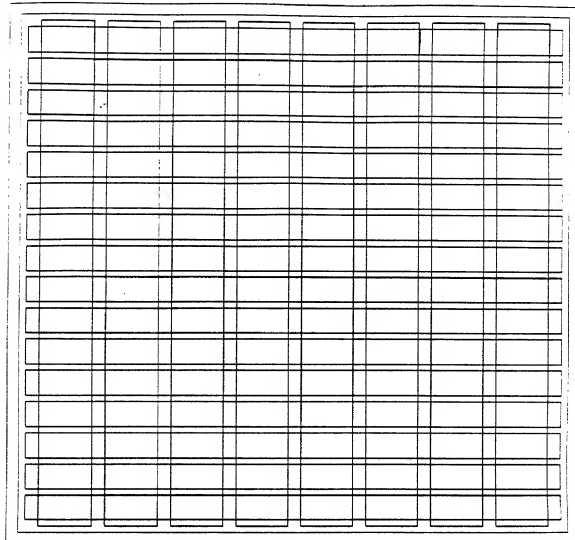
FIG. 33D4

0989977-070601

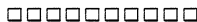
(SEE FIG. 33D2)

25

TO FIG. 33E2



DVC2
GENERATOR 504



VCCP
REGULATOR 220

DVC2
GENERATOR 505

TO
FIG.
33E3

FIG. 33E1

09899977.070604

09899977-070601

TO FIG. 33E1

127,367

27

10

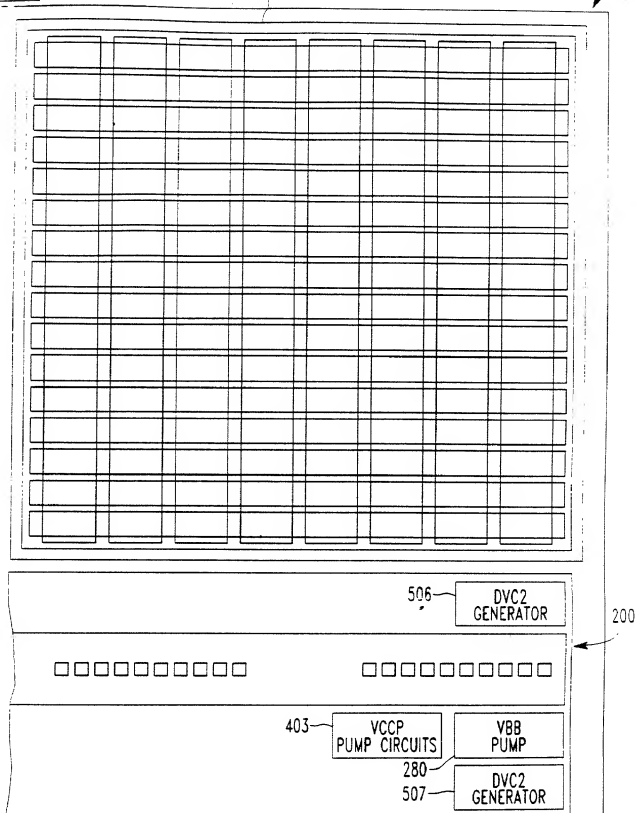


FIG. 33E2

TO
FIG.
33E4

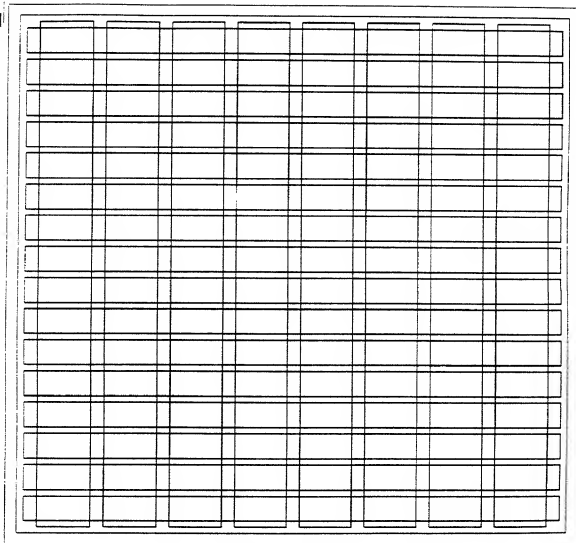
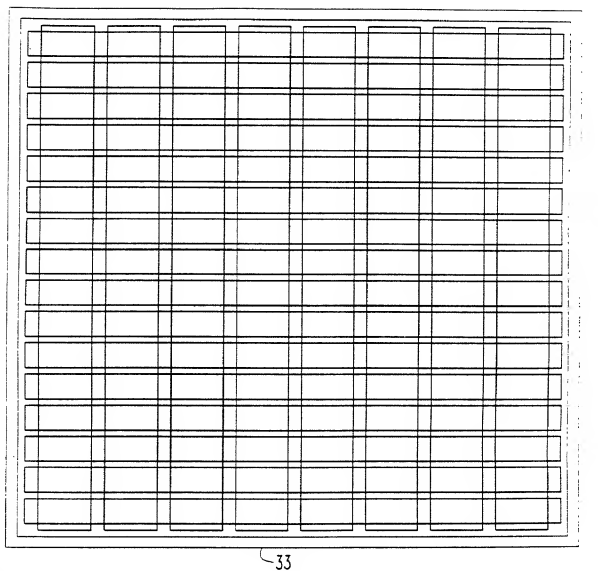
TO
FIG.
33E1

FIG. 33E3

TO FIG. 33E4

09809977-070601

0989977-070601



TO FIG. 33E3

FIG. 33E4

TO
FIG.
33E2

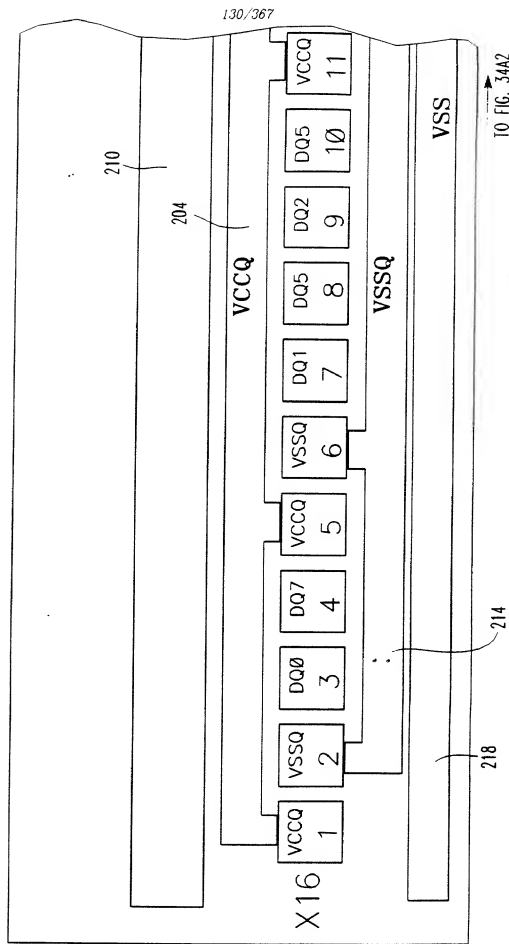
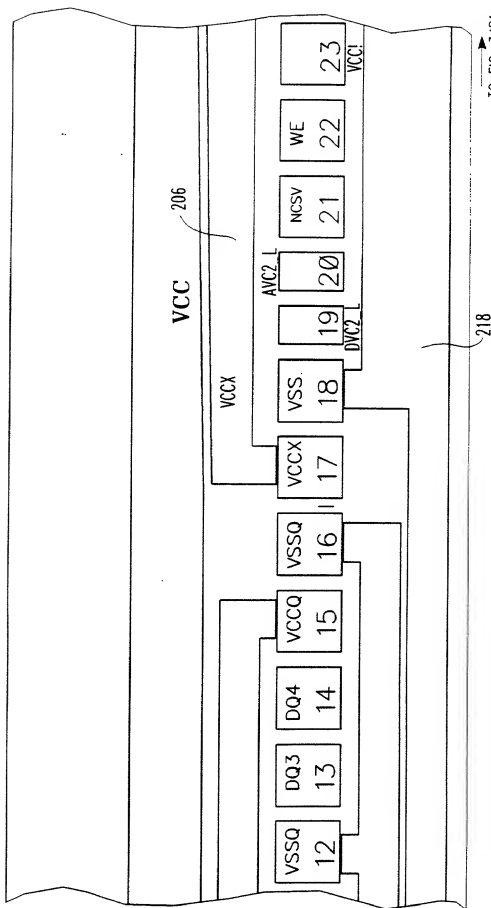


FIG. 34A1

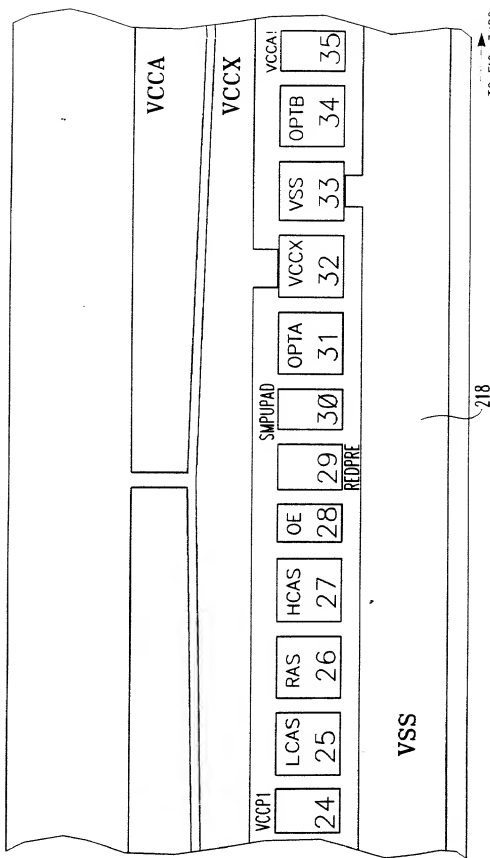
TO FIG. 34A1
←



TO FIG. 34B1
→

FIG. 34A2

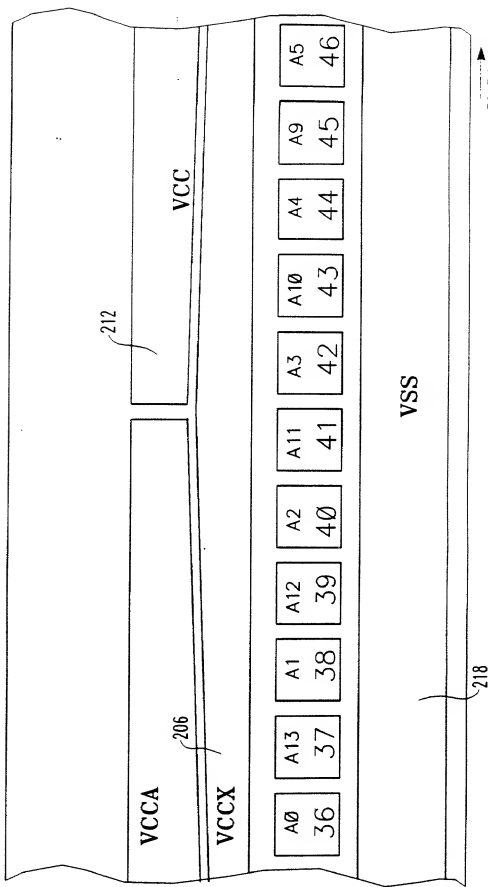
TO FIG. 34A2



TO FIG. 34B2

FIG. 34B1

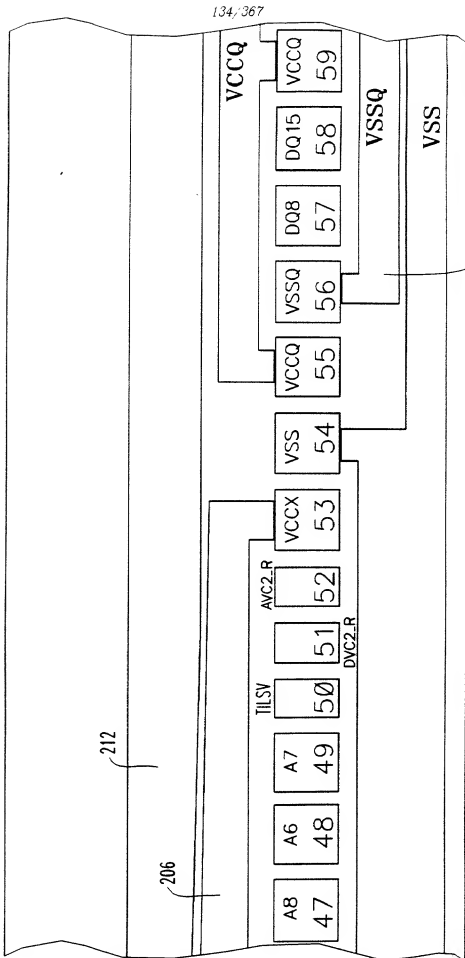
TO FIG. 3A



TO FIG. 3A

FIG. 3A

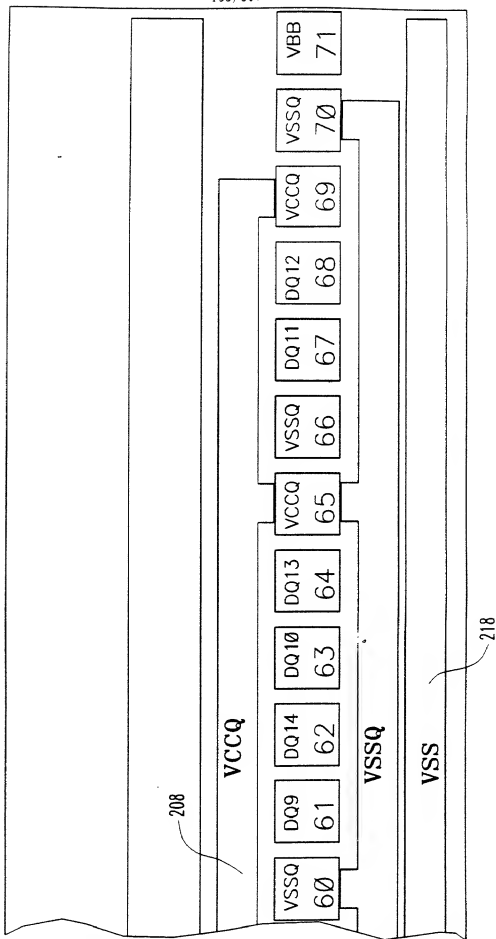
TO FIG. 34B2



TO FIG. 34C2

FIG. 34C1

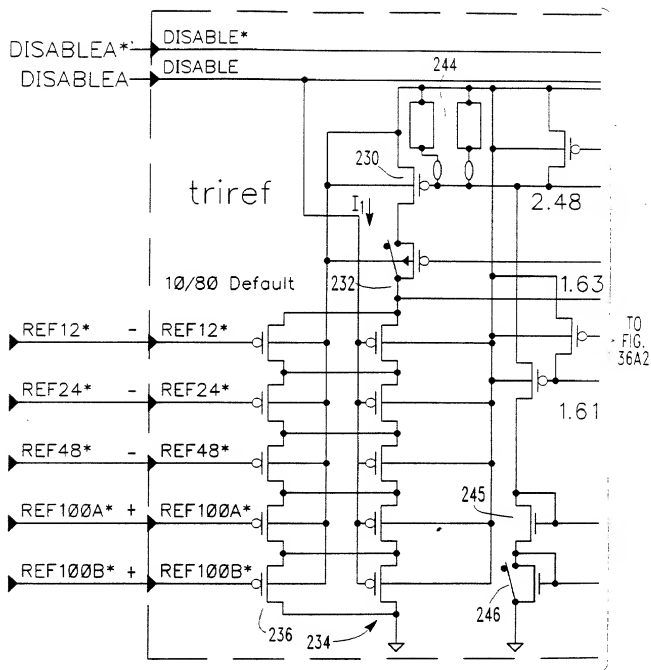
TO FIG. 34C1



135, 367

FIG. 34C2





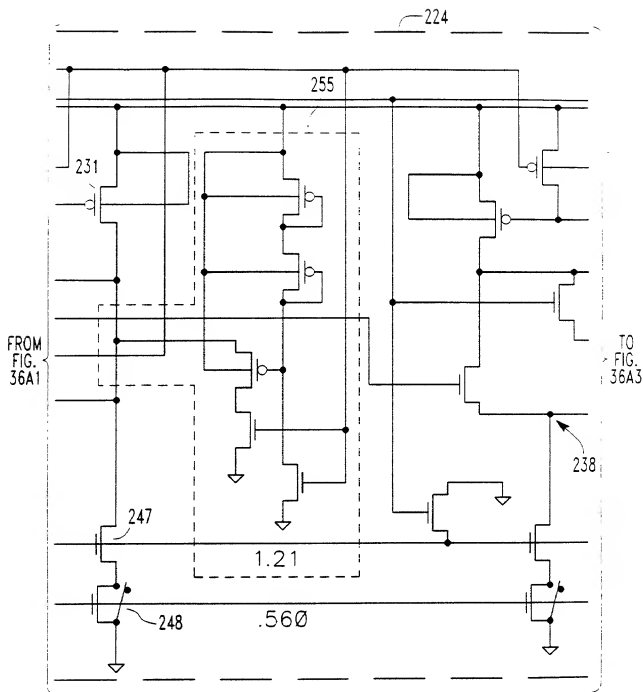
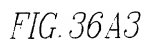


FIG. 36A2



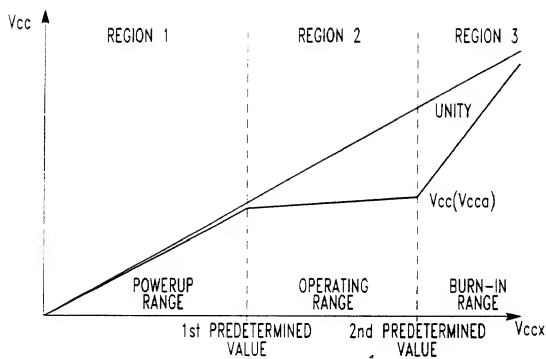


FIG. 36B

SEL32M<0:7>

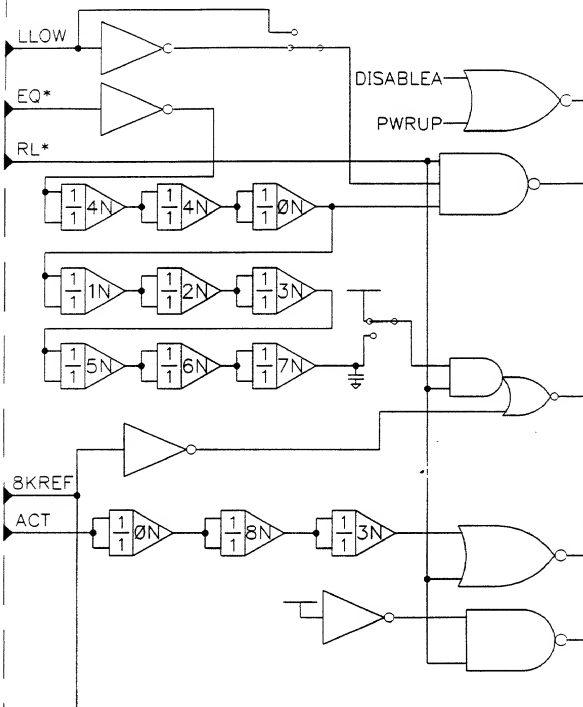
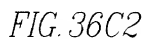
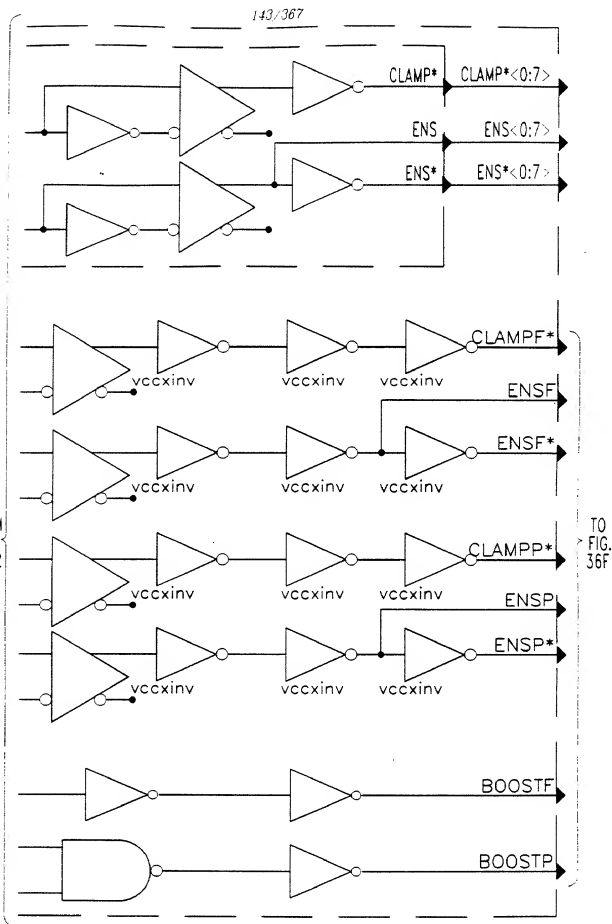
TO
FIG.
36C2

FIG. 36C1



FROM
FIG.
36C2



TO
FIG.
36F

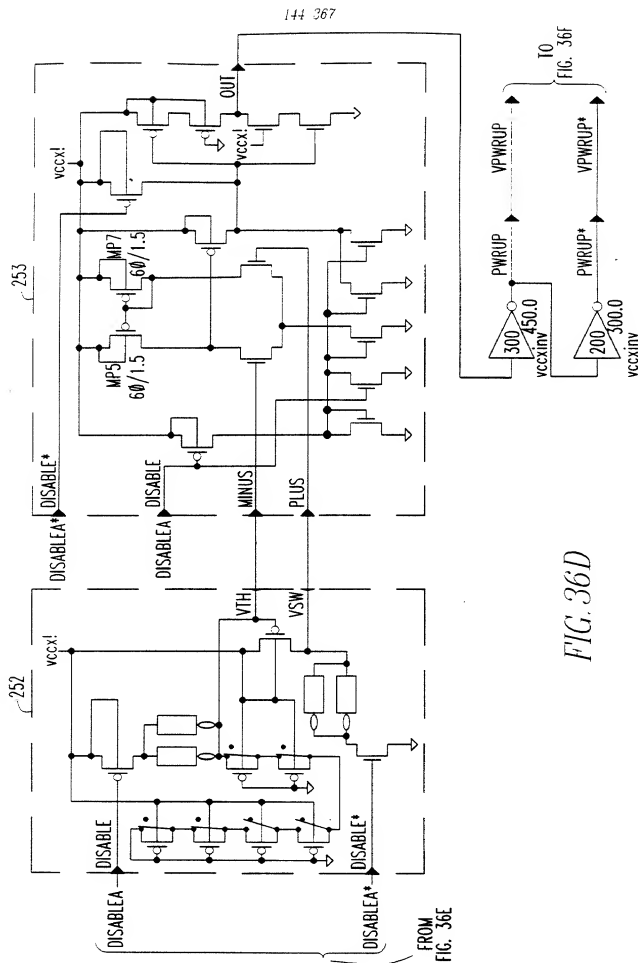
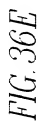


FIG. 36D



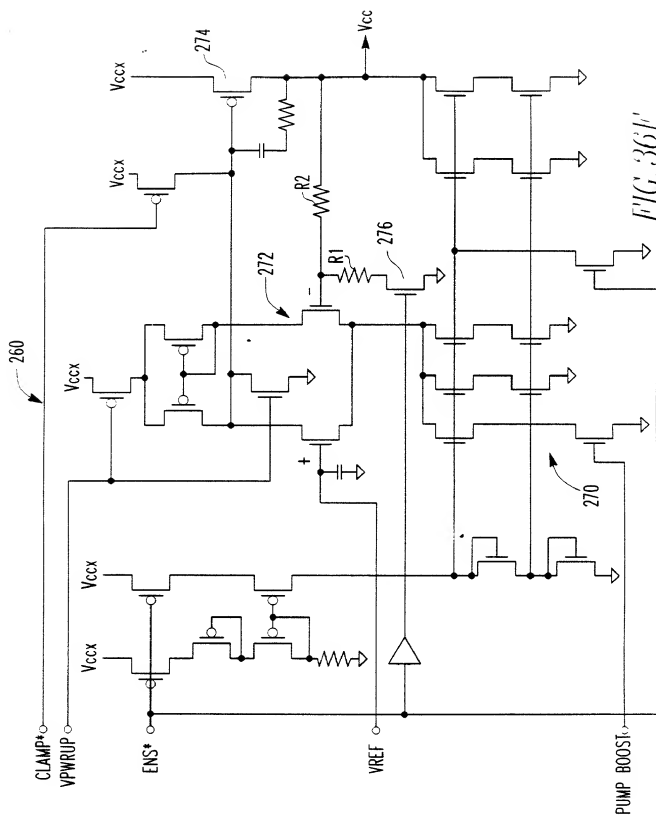


FIG. 361'

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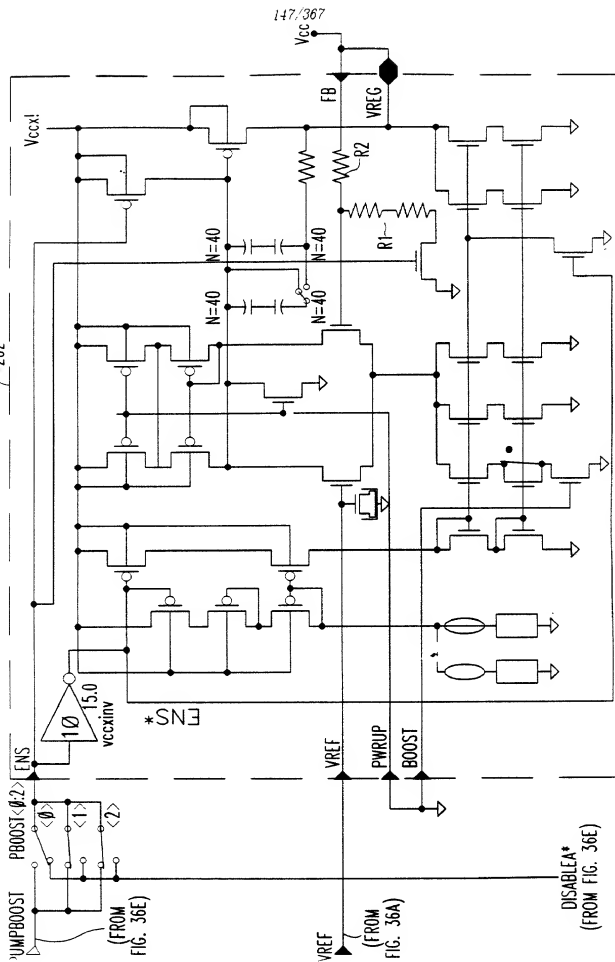
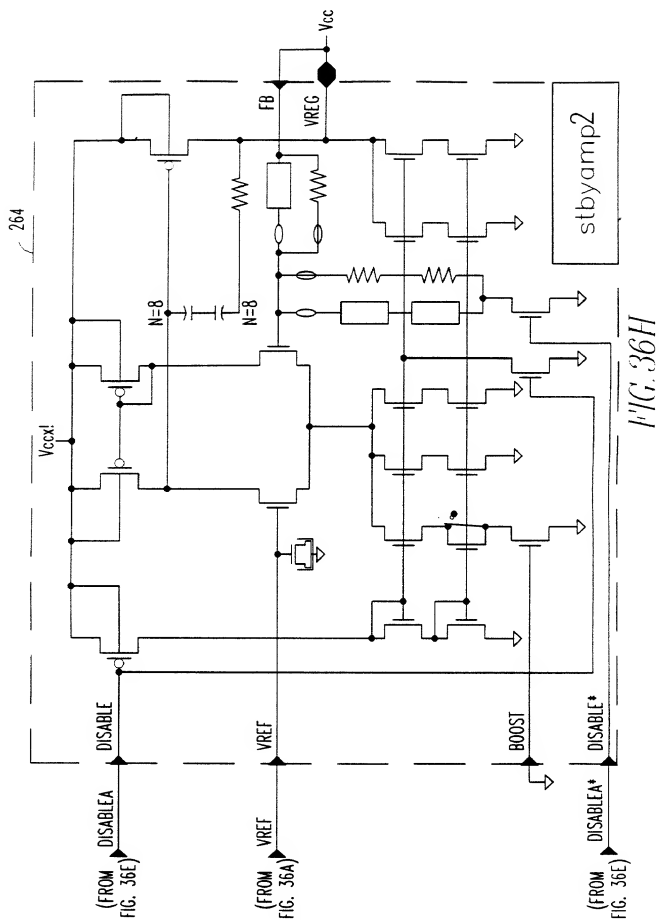
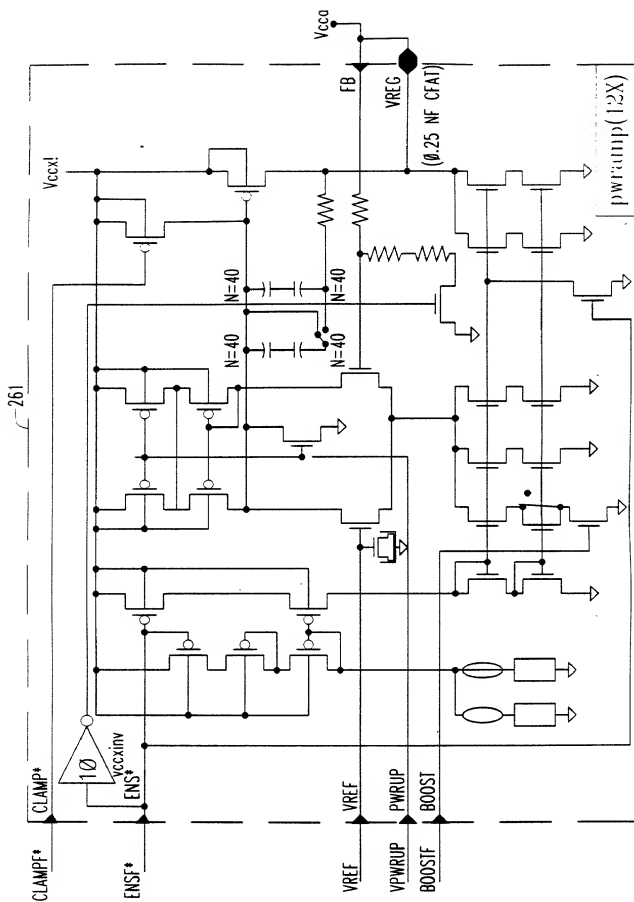


FIG. 36G





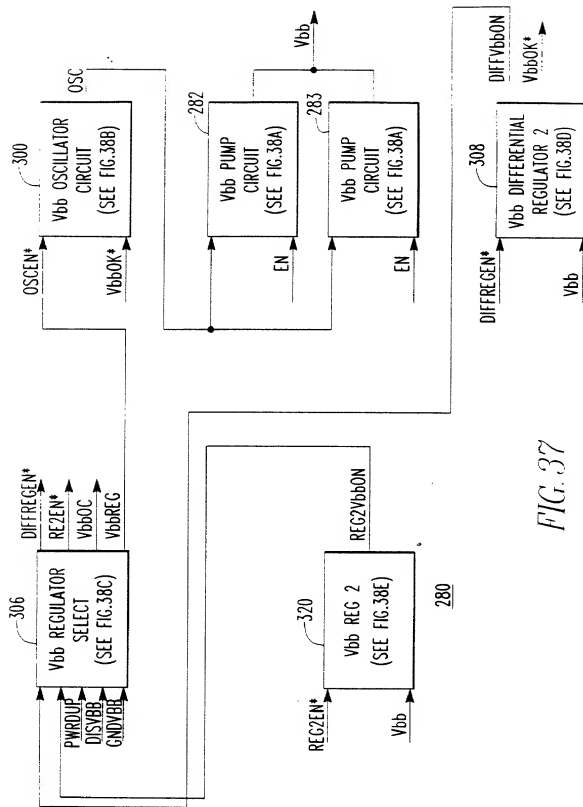
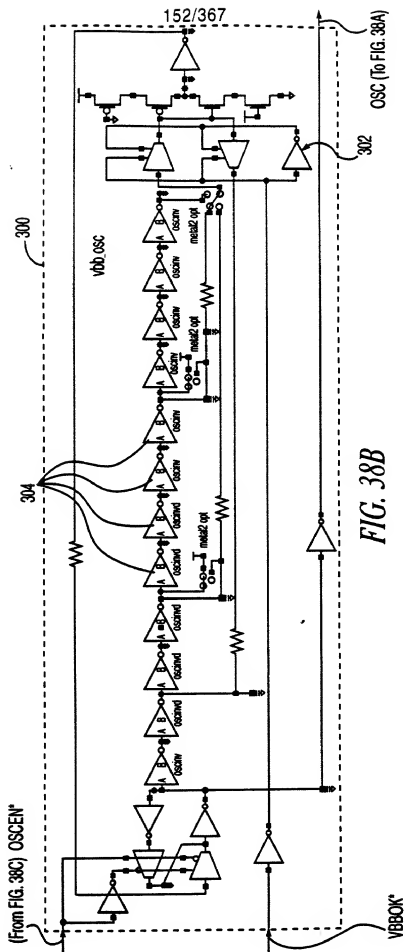


FIG. 37



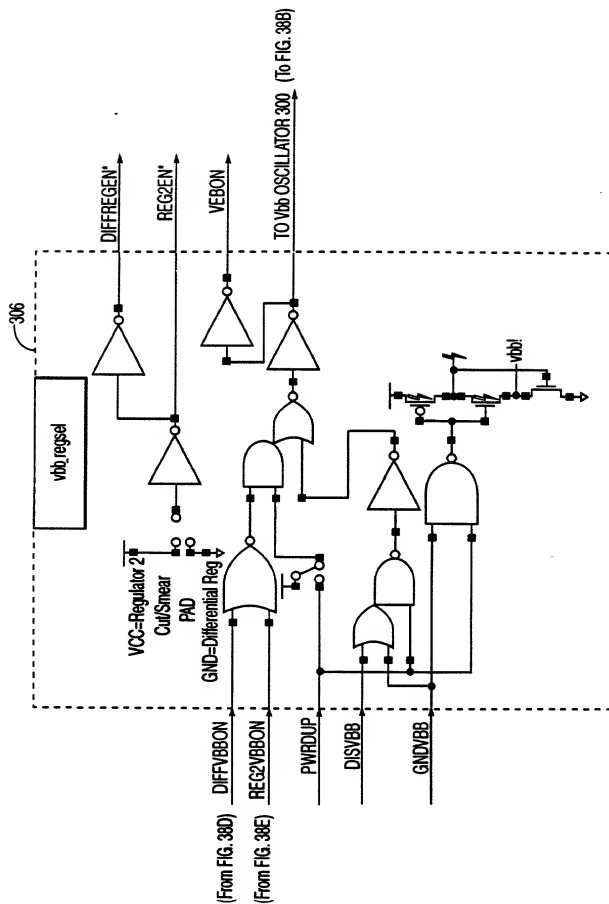
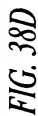


FIG. 38C



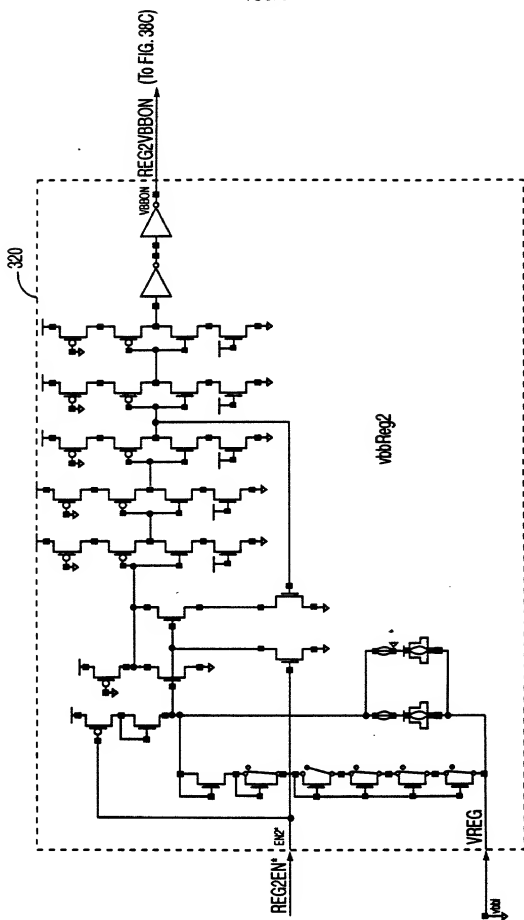


FIG. 38E

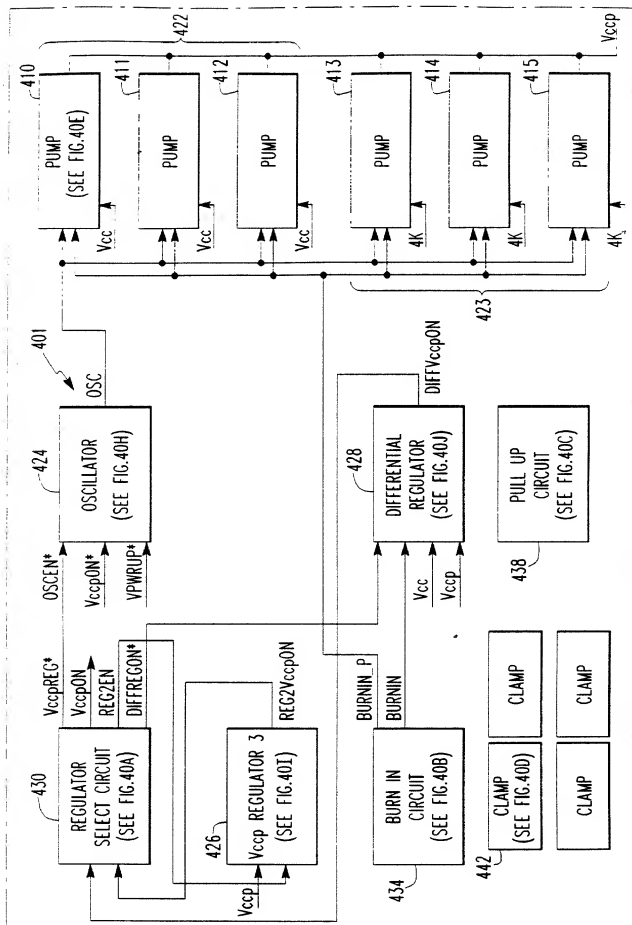


FIG. 39

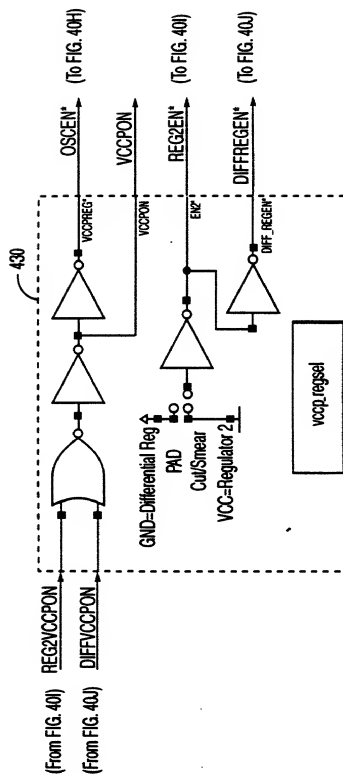


FIG. 40A

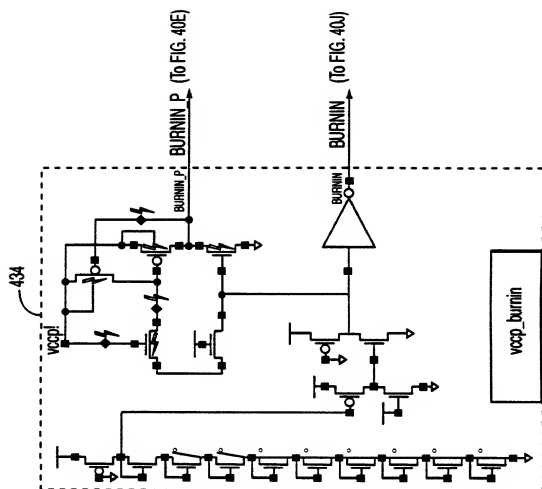


FIG. 40B

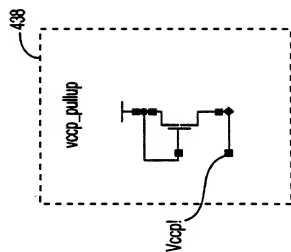


FIG. 40C

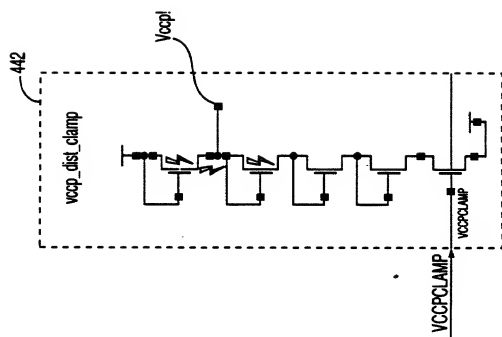
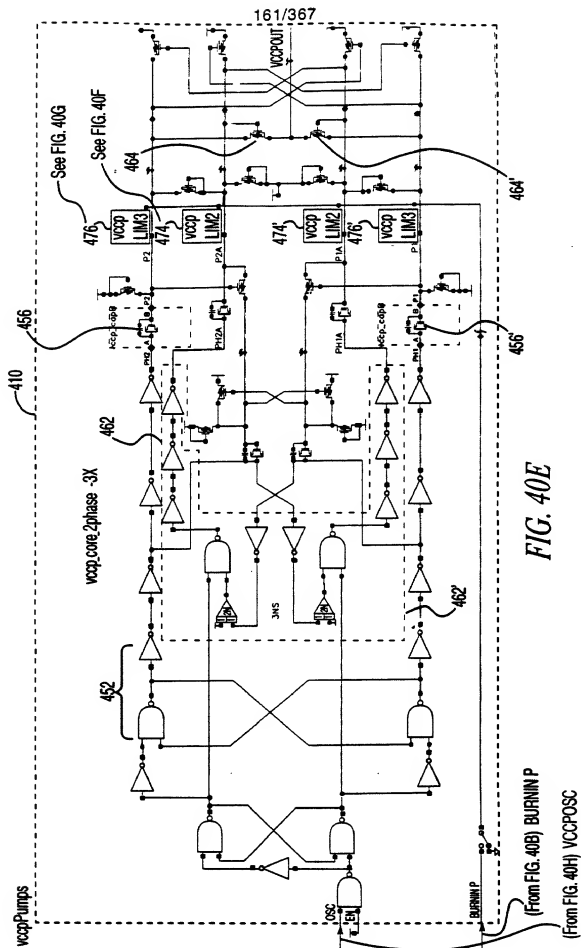


FIG. 40D



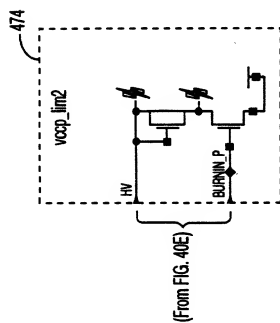


FIG. 40F

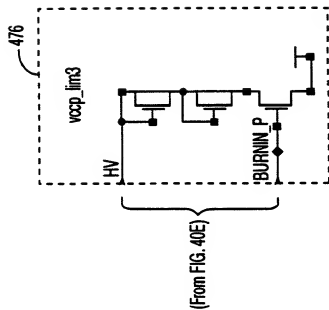


FIG. 40G

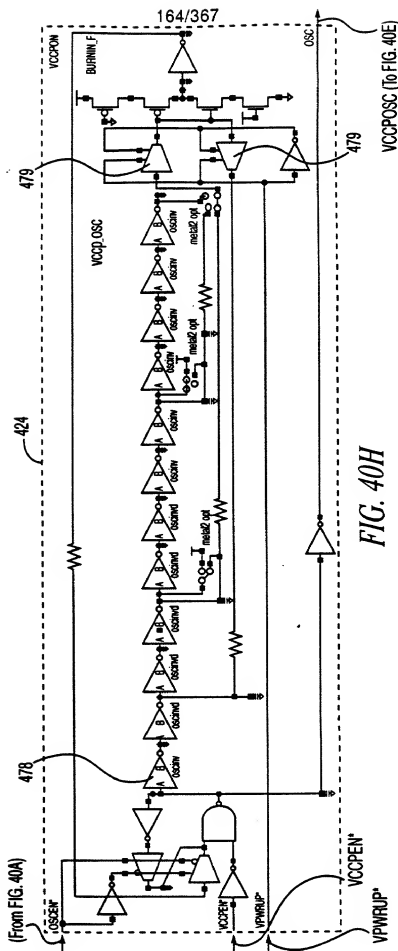


FIG. 40H

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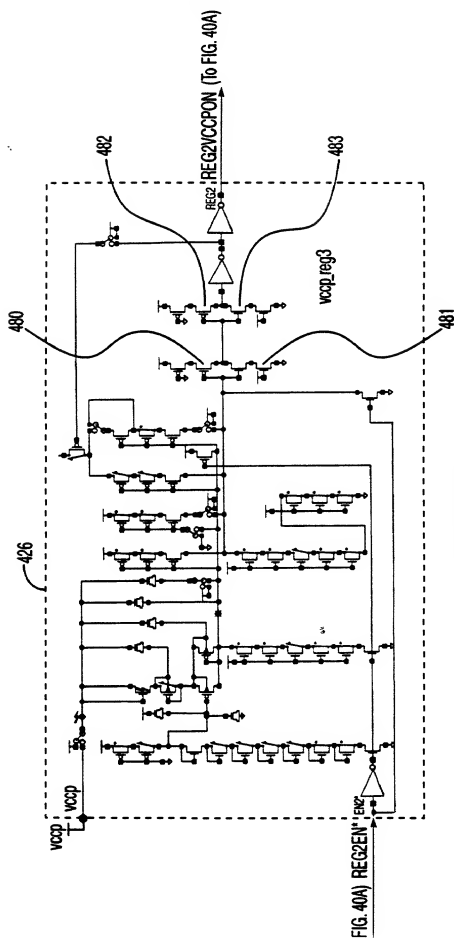


FIG. 40A

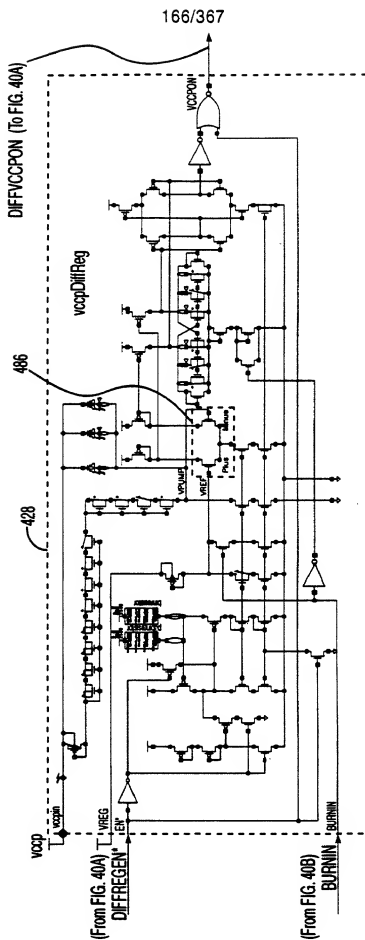


FIG. 40J

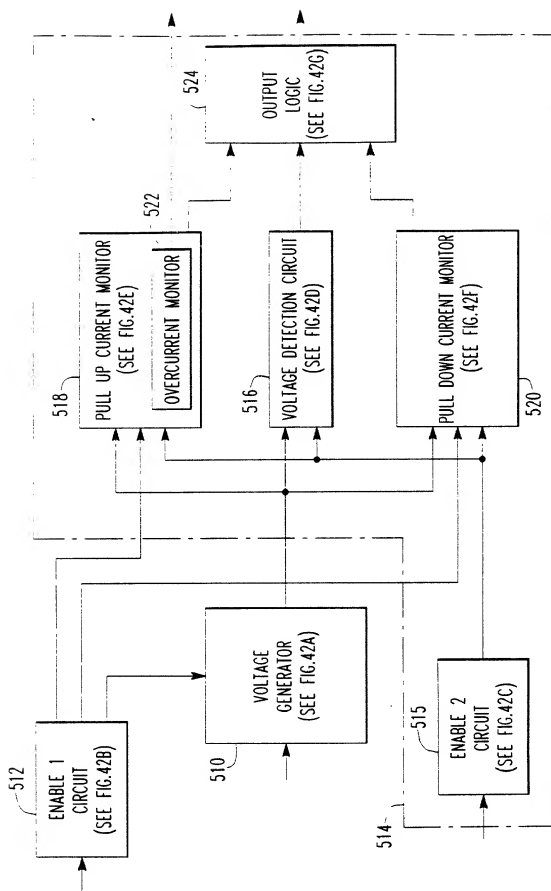


FIG. 1

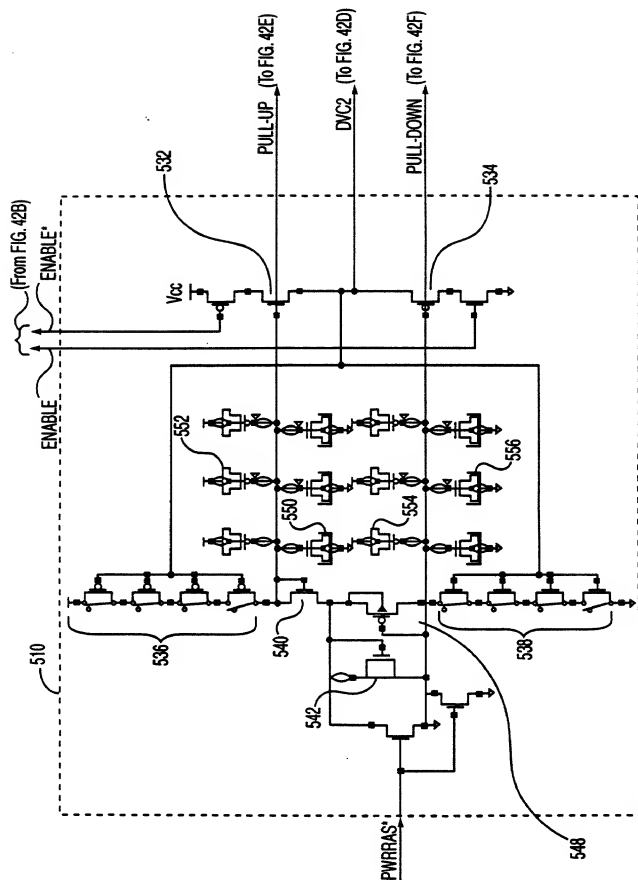


FIG. 42A

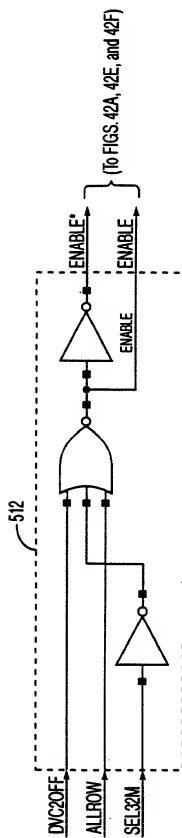


FIG. 42B

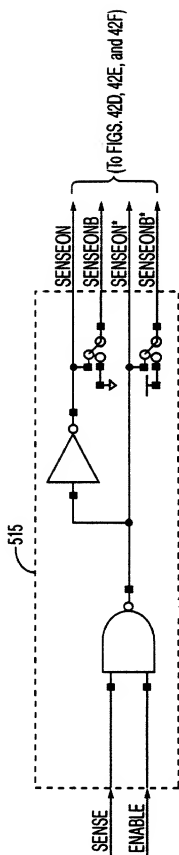


FIG. 42C

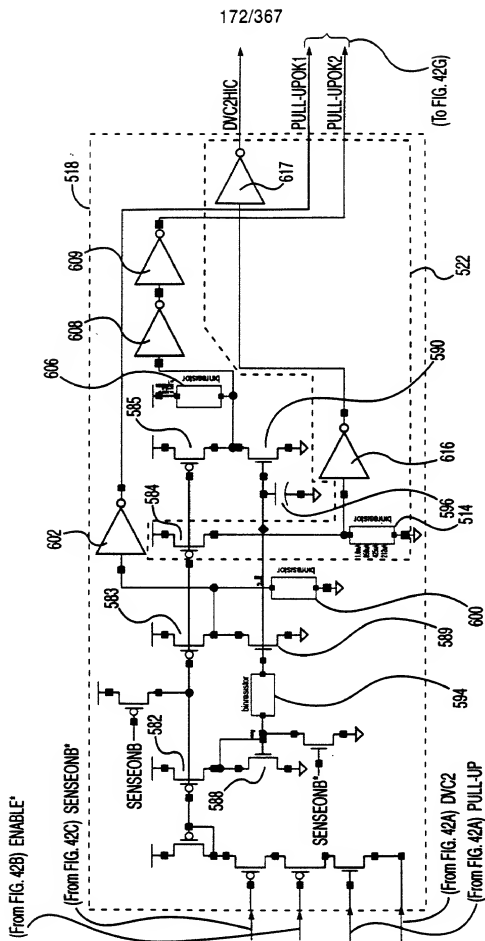
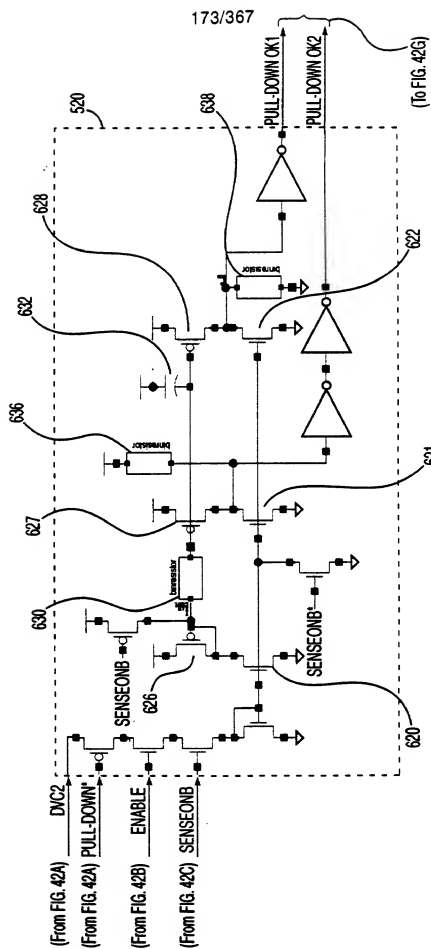


FIG. 42E



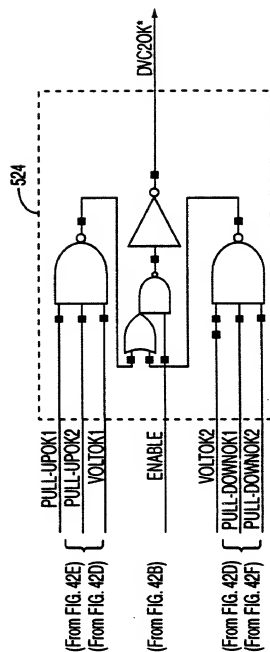


FIG. 42G

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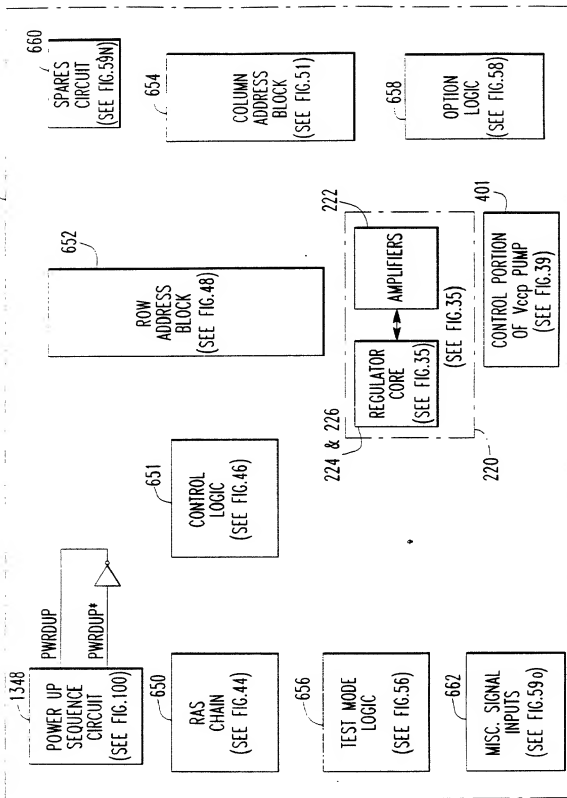


FIG. 43

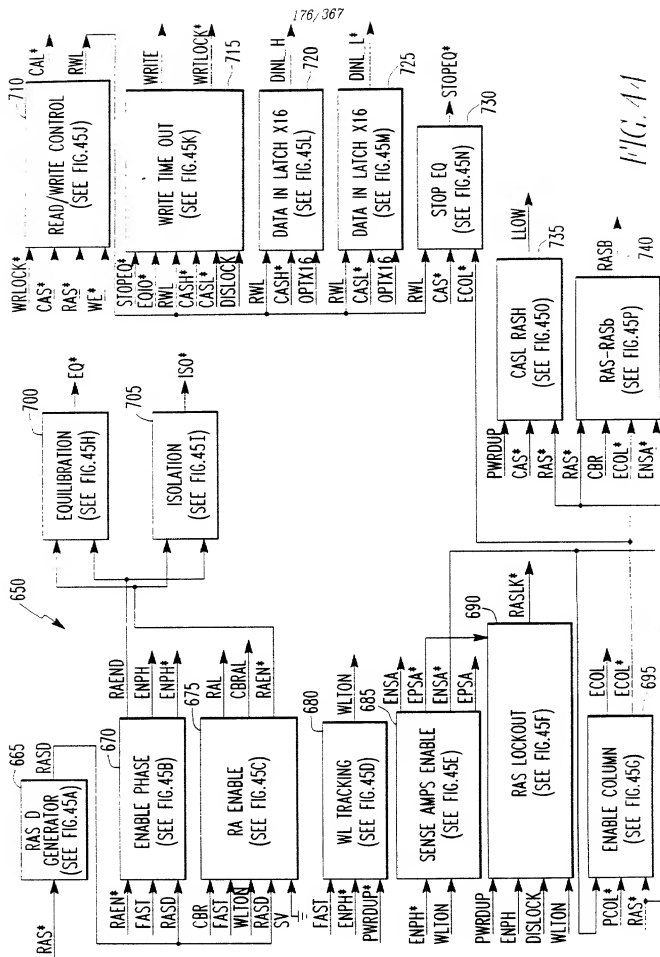


FIG. 4A

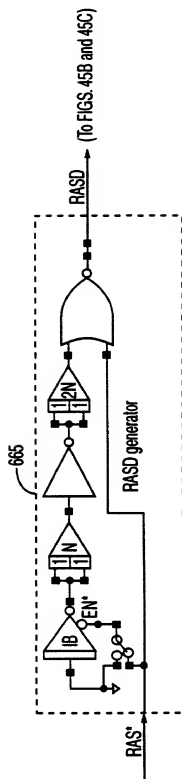


FIG. 45A

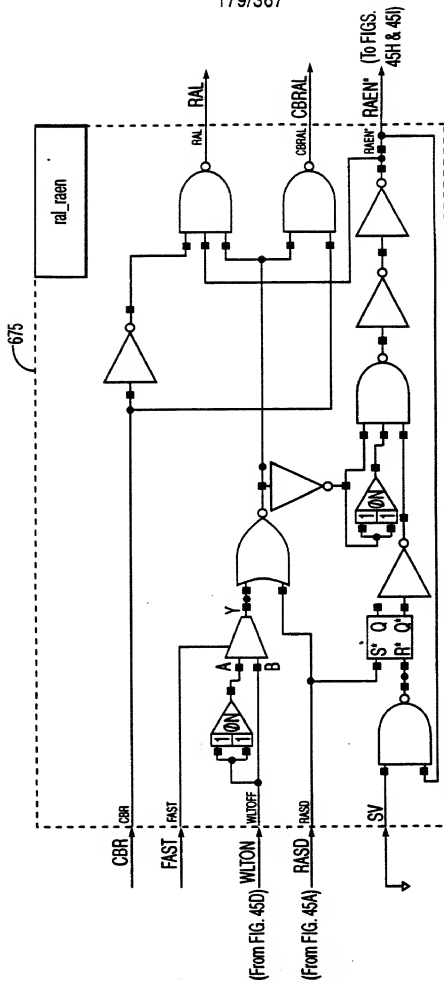
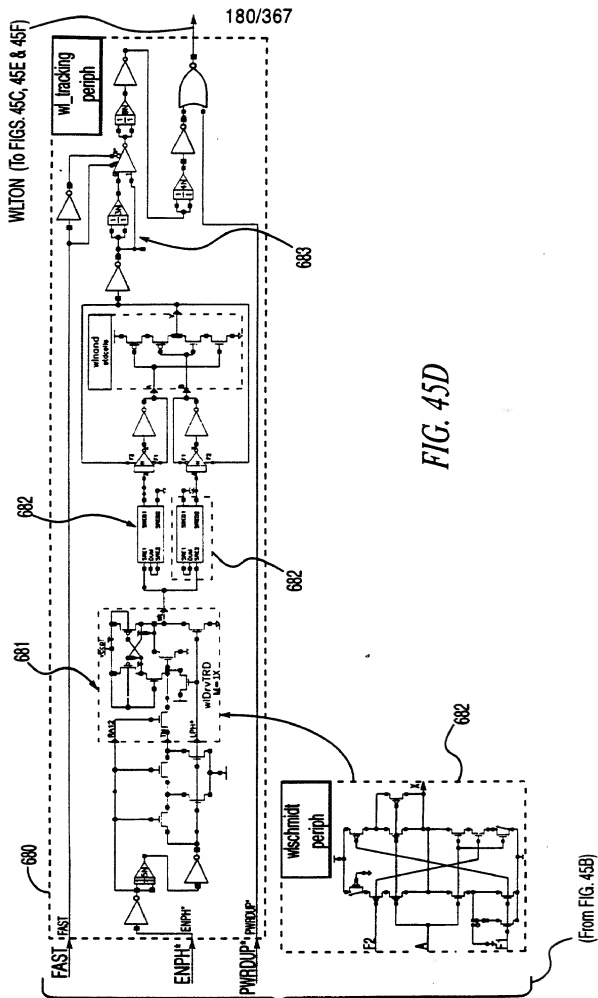


FIG. 45C



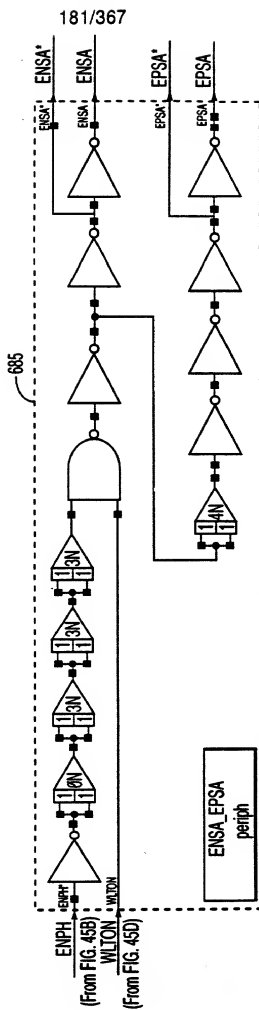


FIG. 45E

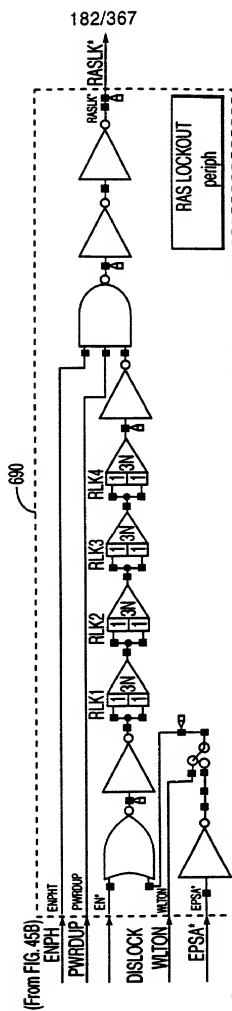


FIG. 45F

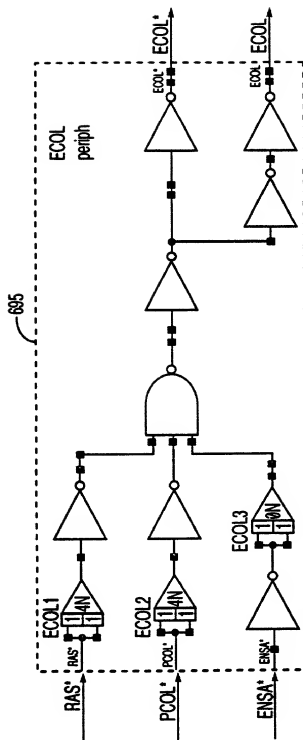


FIG. 45G

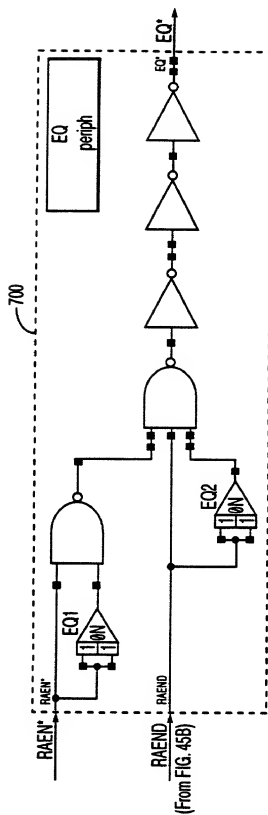


FIG. 45H

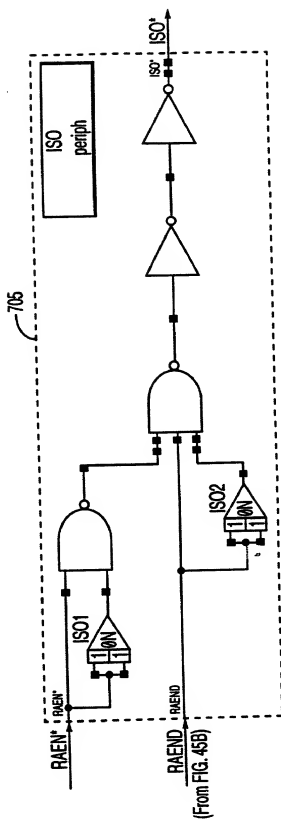


FIG. 45I

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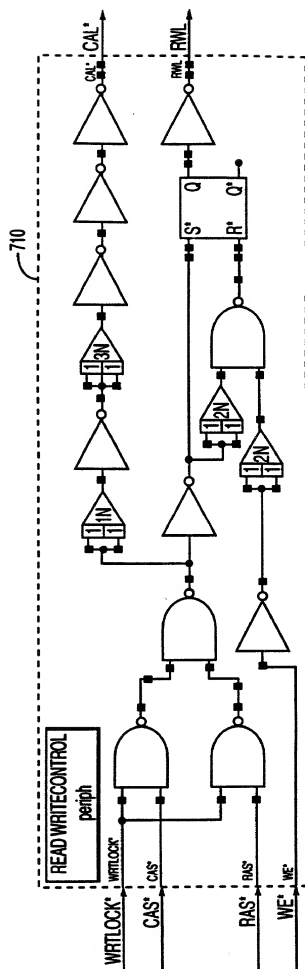


FIG. 45J

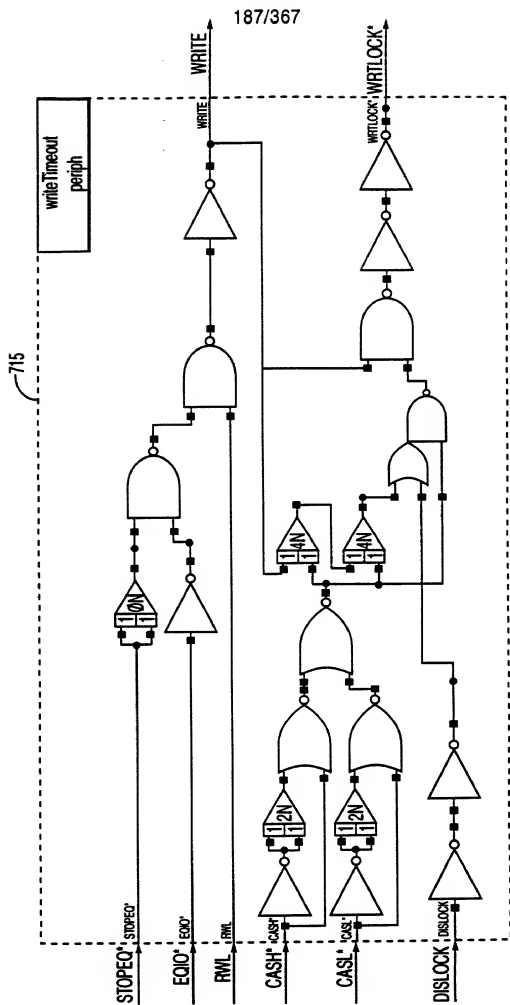


FIG. 45K

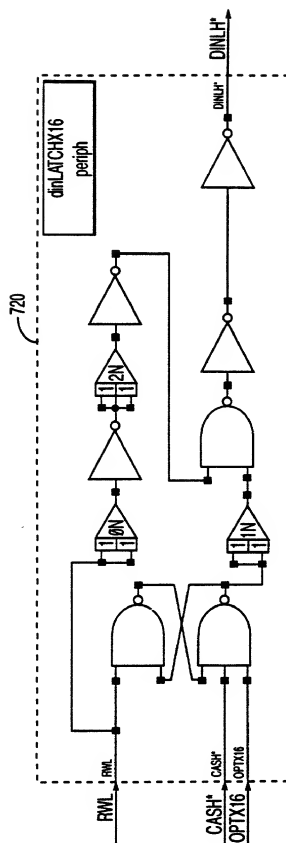


FIG. 45L

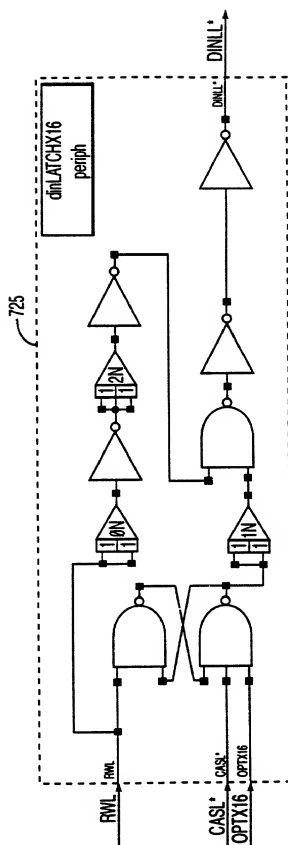


FIG. 45M

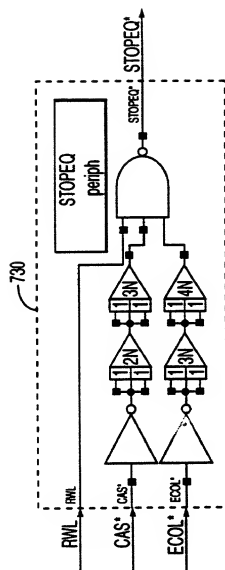


FIG. 45N

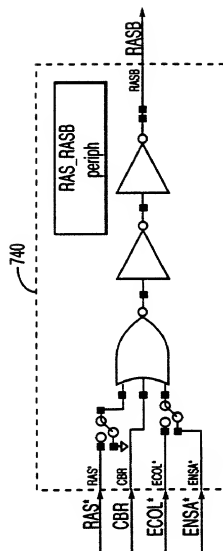


FIG. 45P

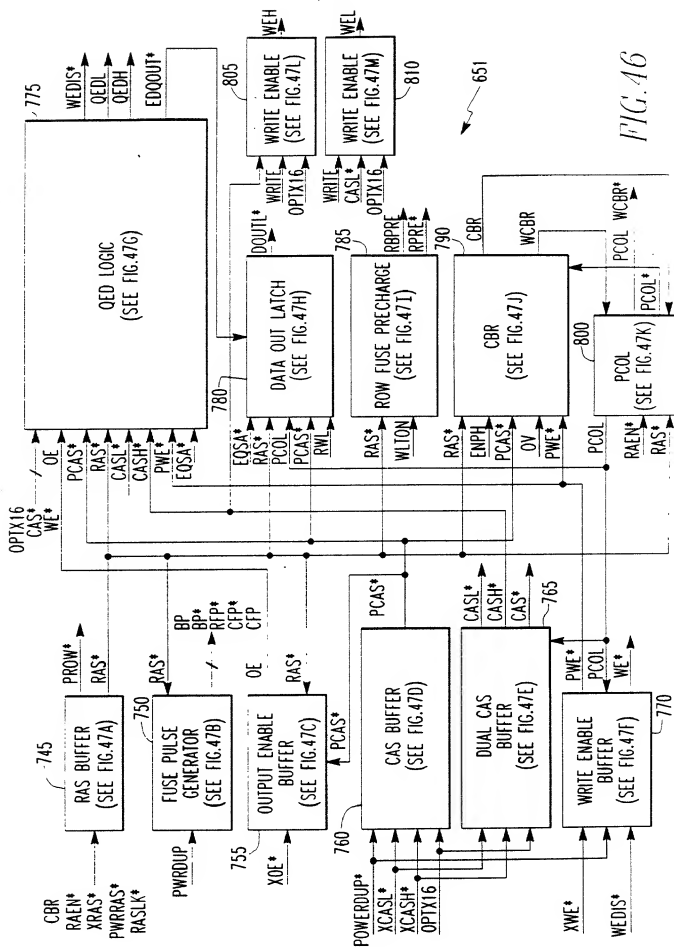


FIG. 46

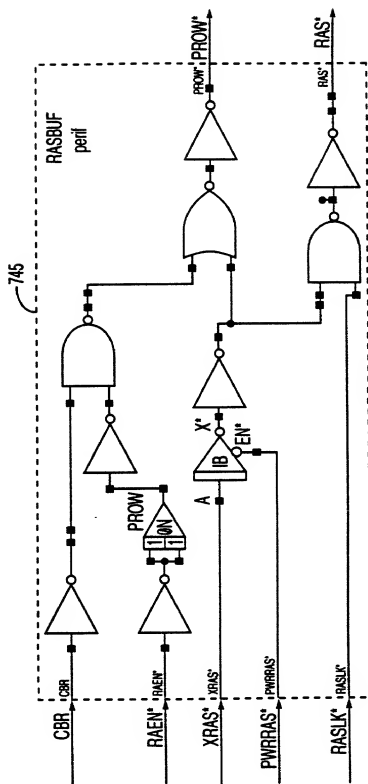


FIG. 47A

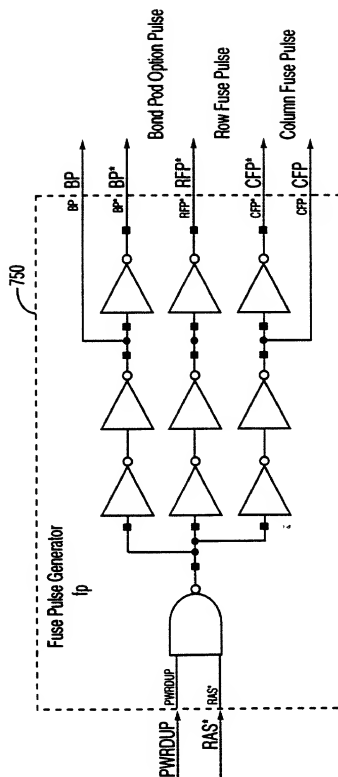


FIG. 47B

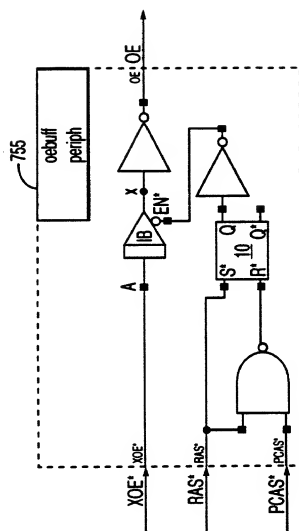


FIG. 47C

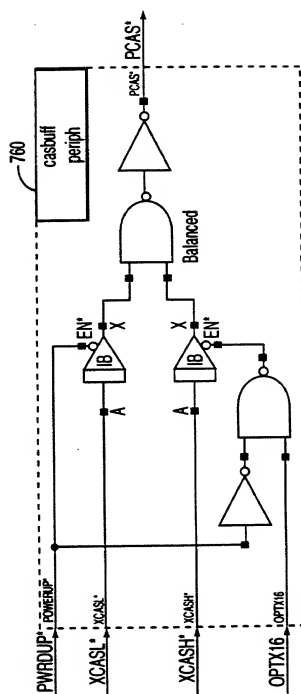


FIG. 47D

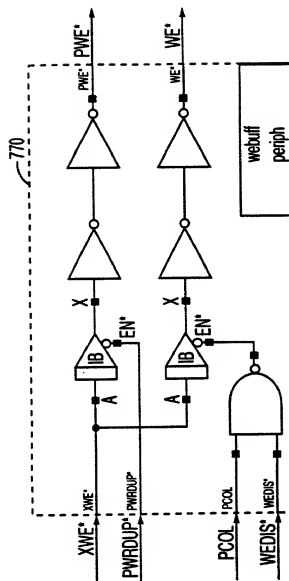


FIG. 47F

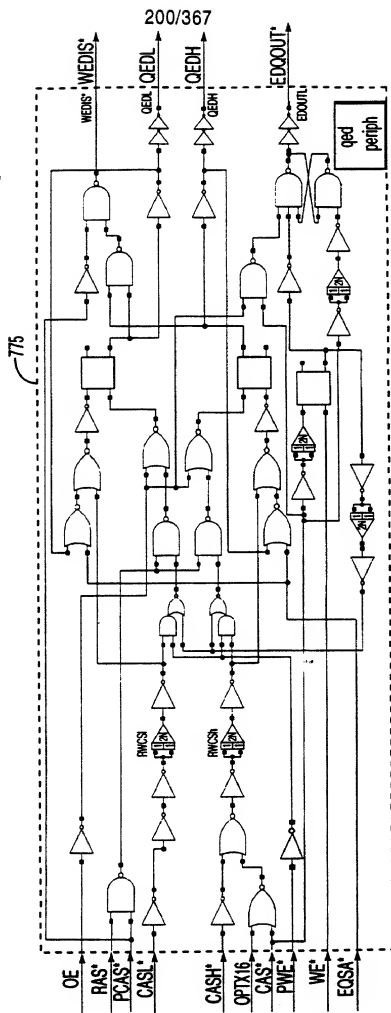


FIG. 47G

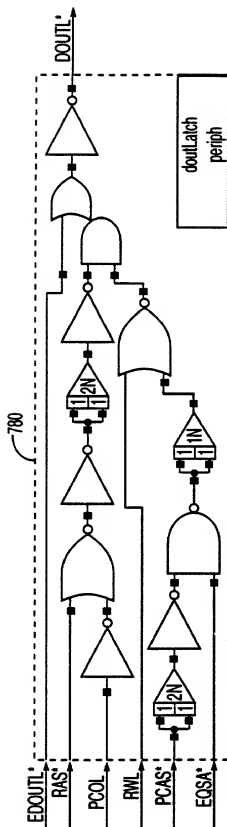


FIG. 47H

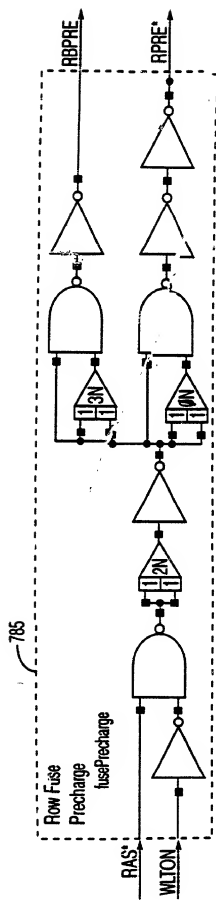


FIG. 471

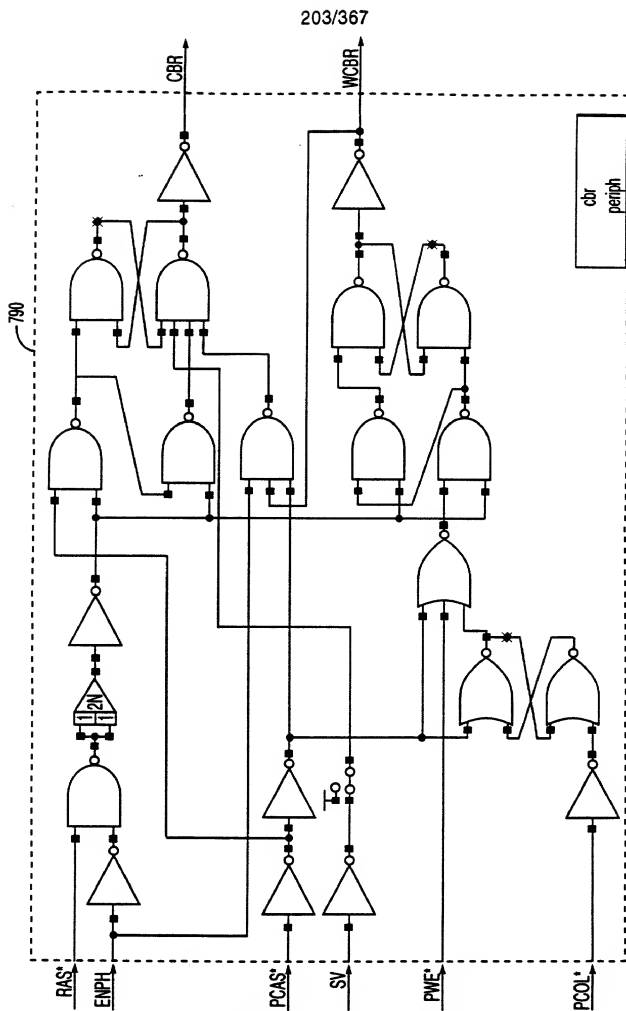


FIG. 47J

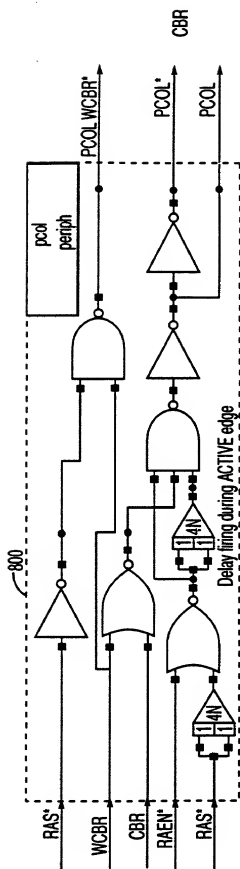


FIG. 47K

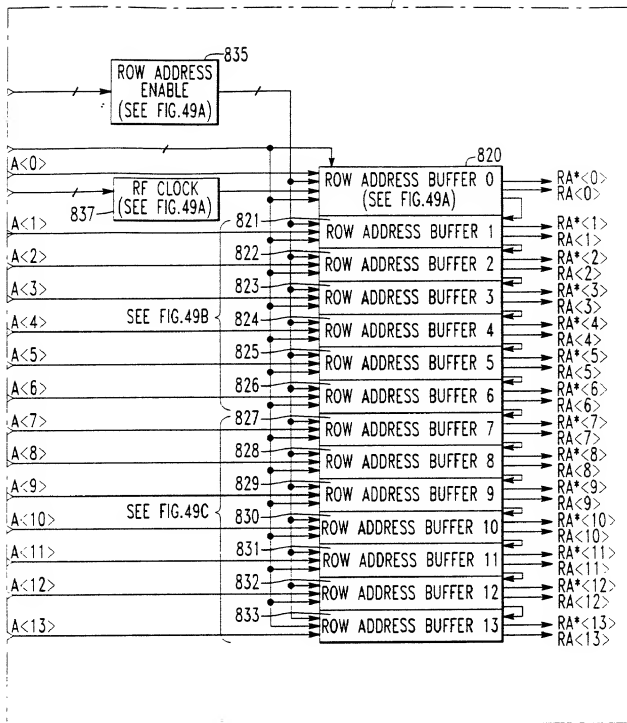


FIG. 48A

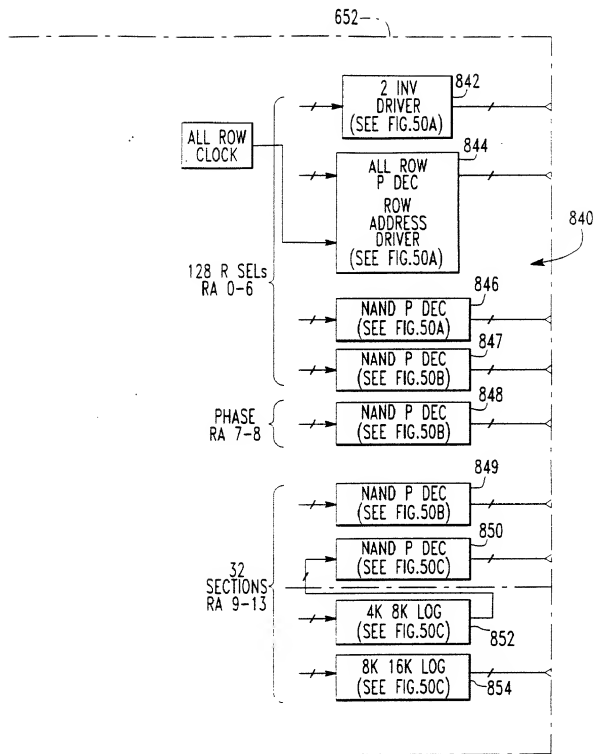


FIG. 48B

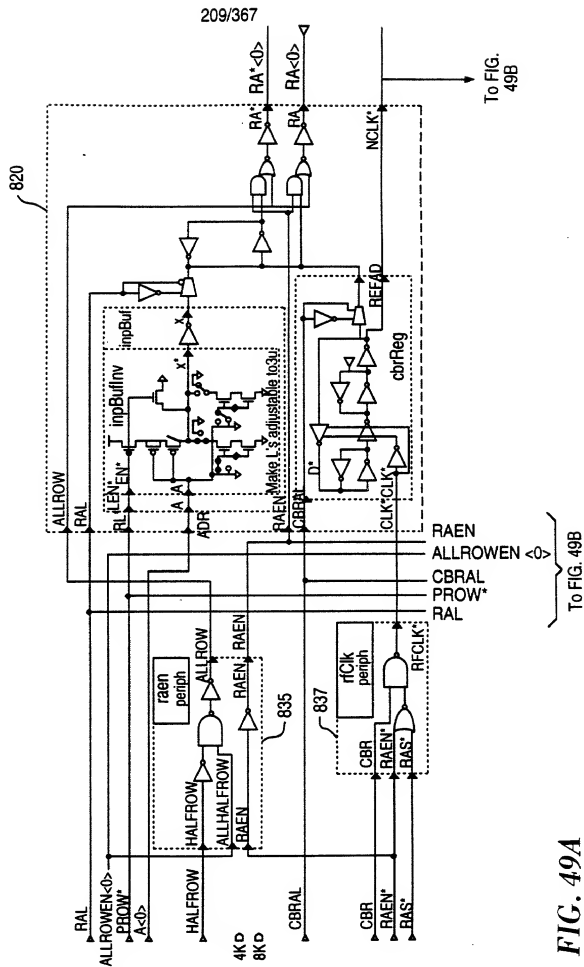
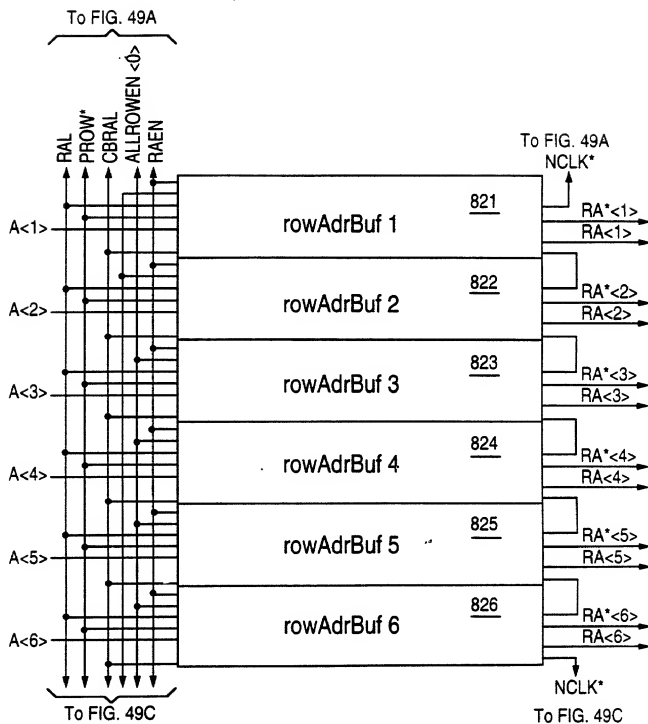


FIG. 49A

**FIG. 49B**

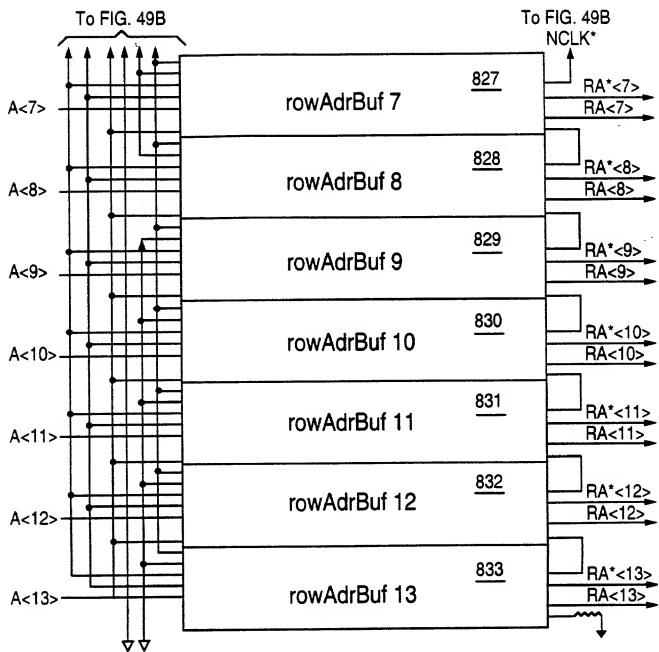


FIG. 49C

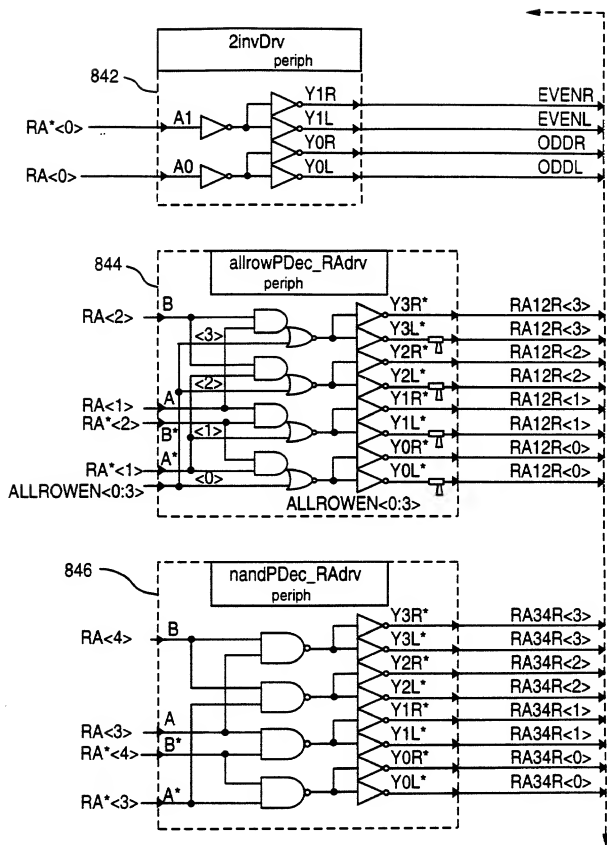
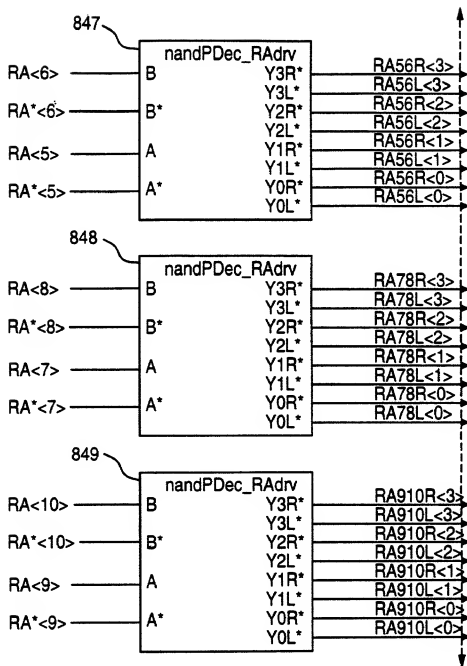


FIG. 50A

**FIG. 50B**

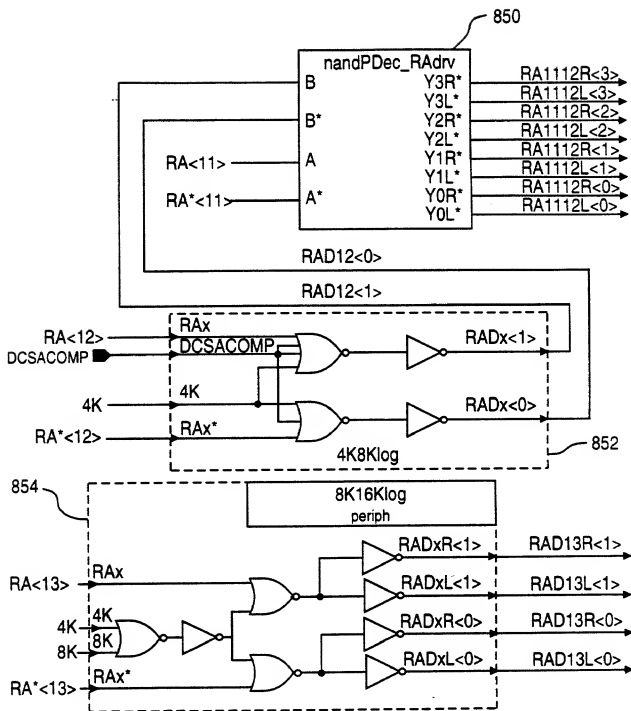


FIG. 50C

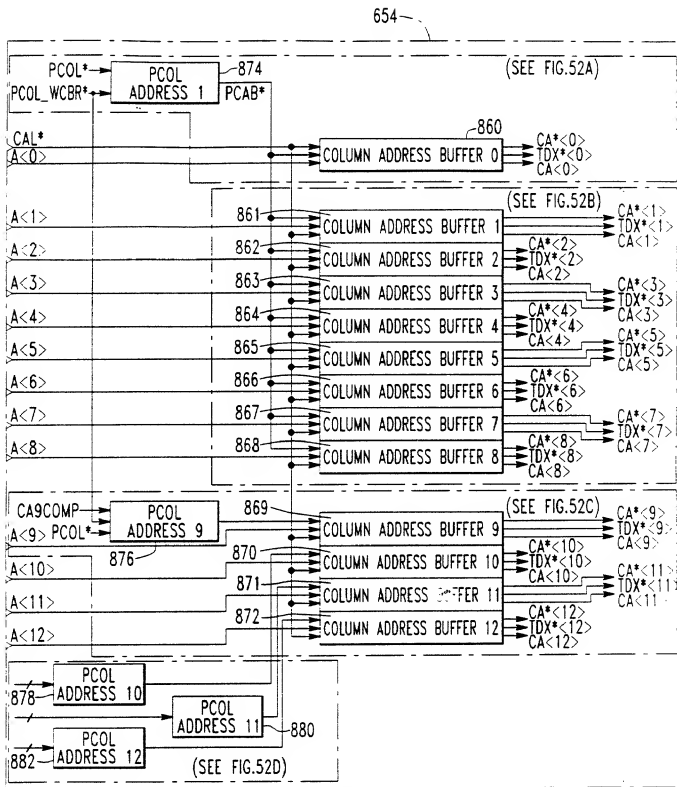


FIG. 51A

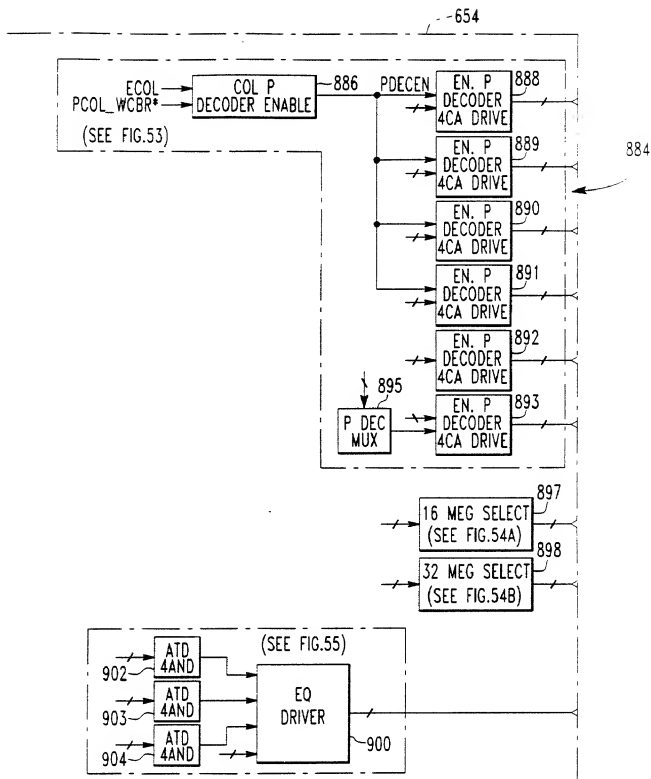
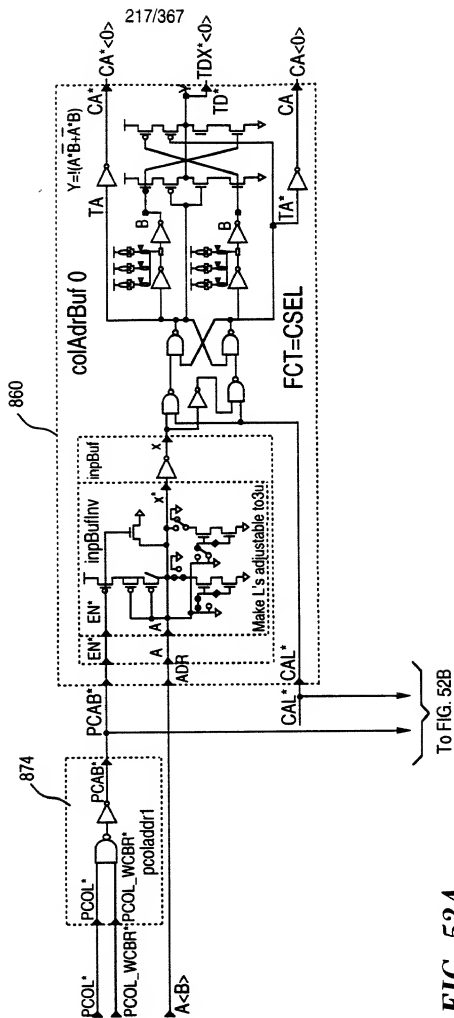


FIG. 51B



To FIG. 52B

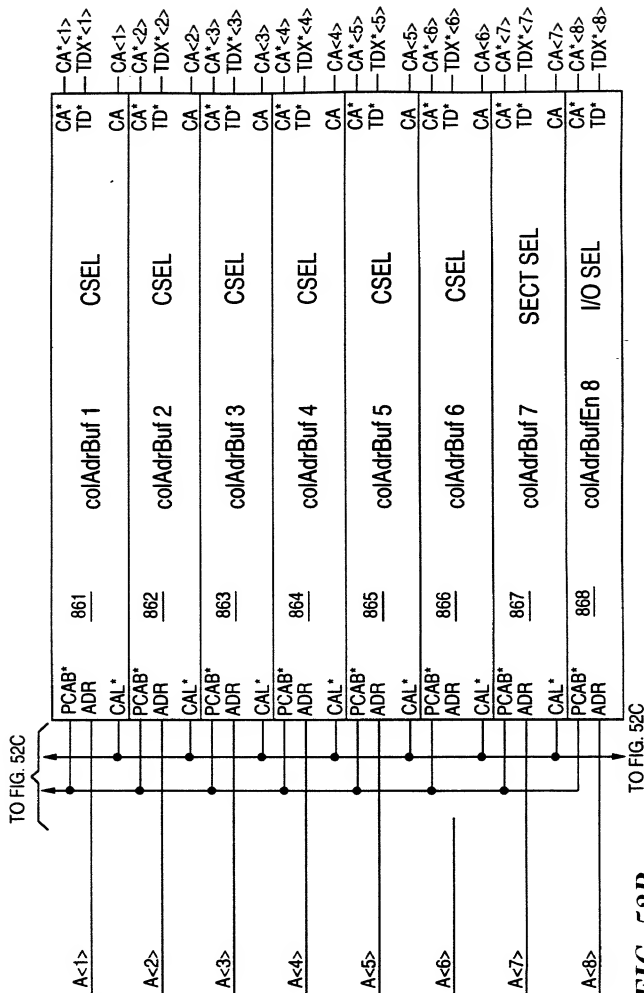
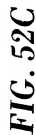


FIG. 52B



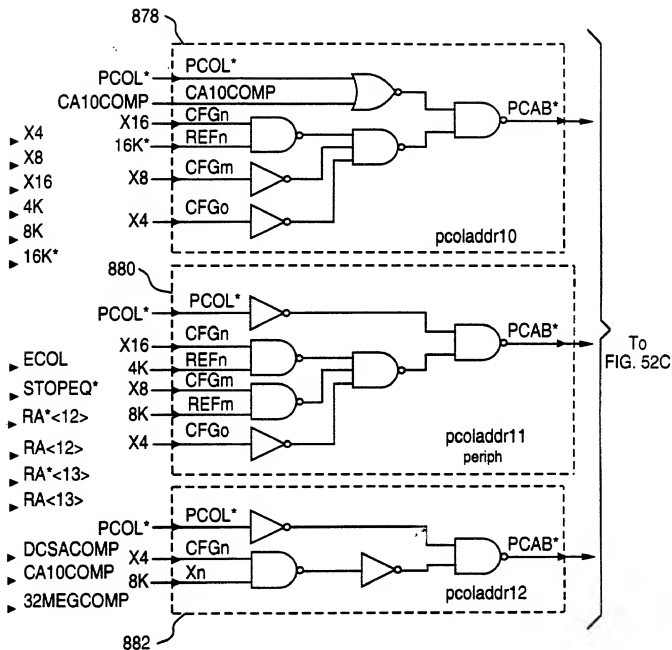
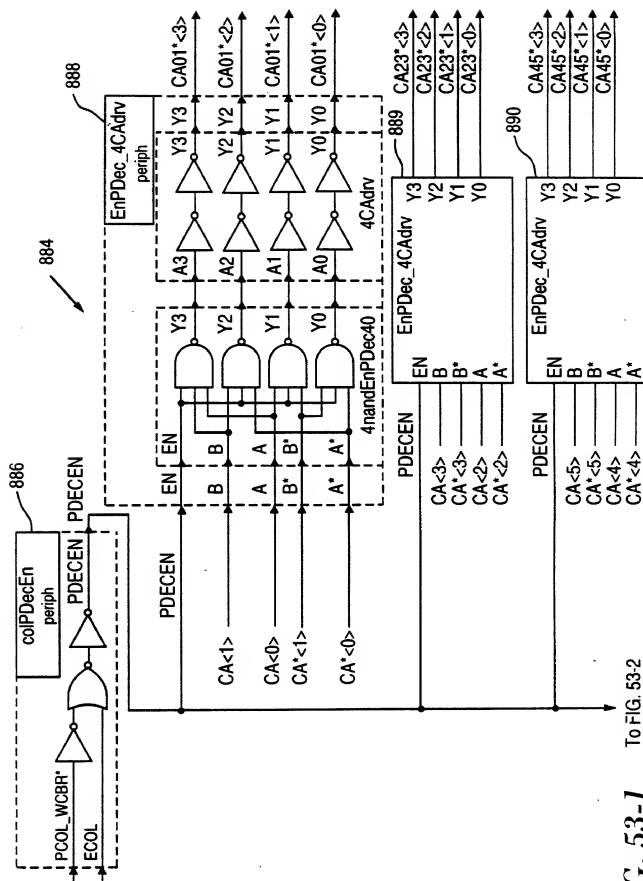


FIG. 52D



To FIG. 53-2

FIG. 53-1

To FIG. 53-1

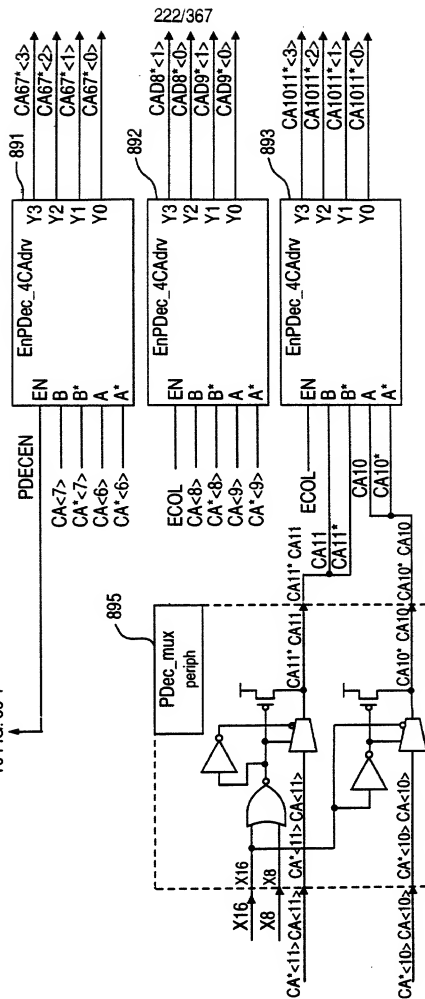


FIG. 53-2

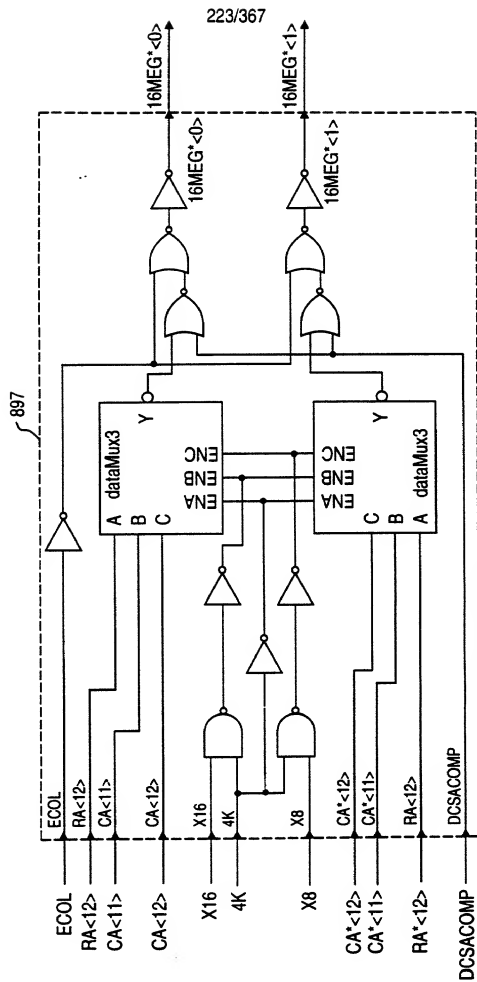


FIG. 54A

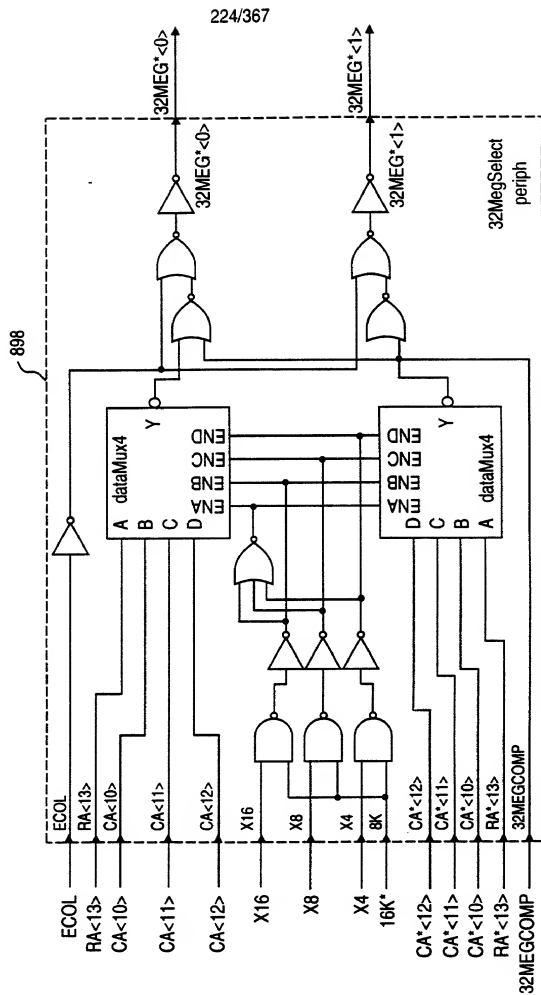


FIG. 54B

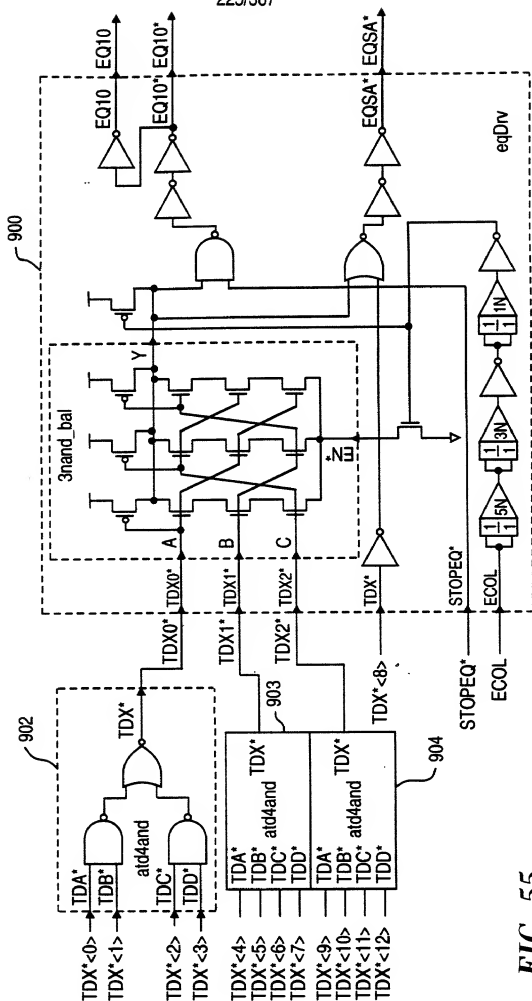


FIG. 55

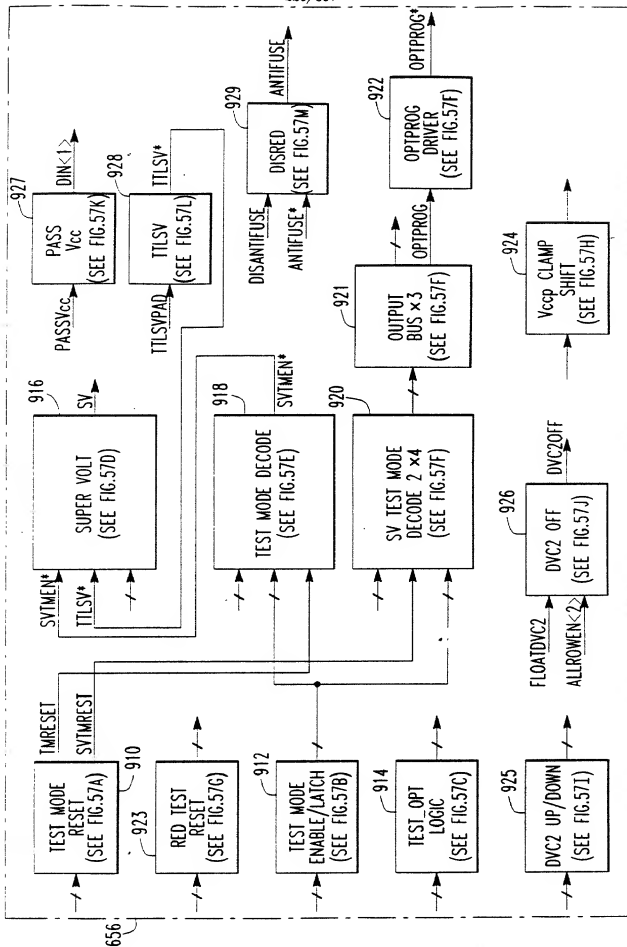


FIG. 56

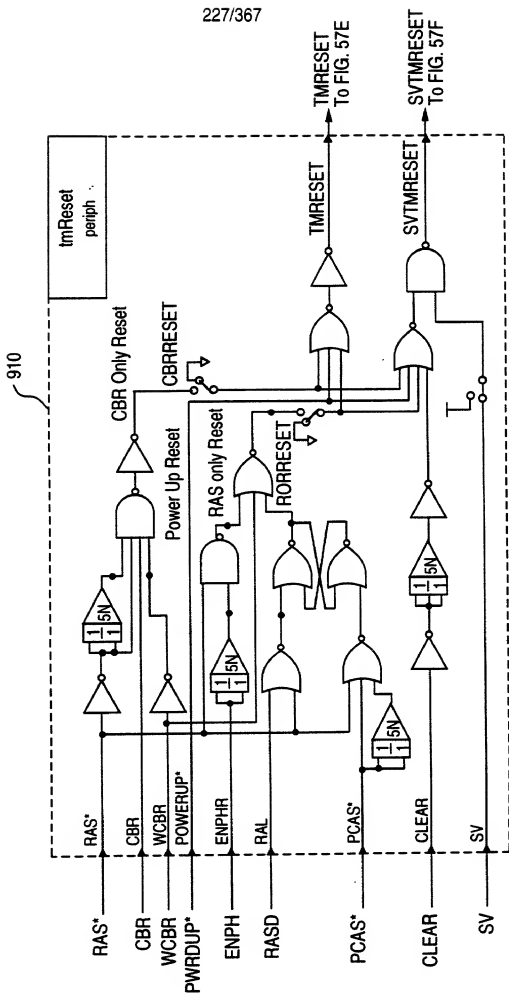


FIG. 57A

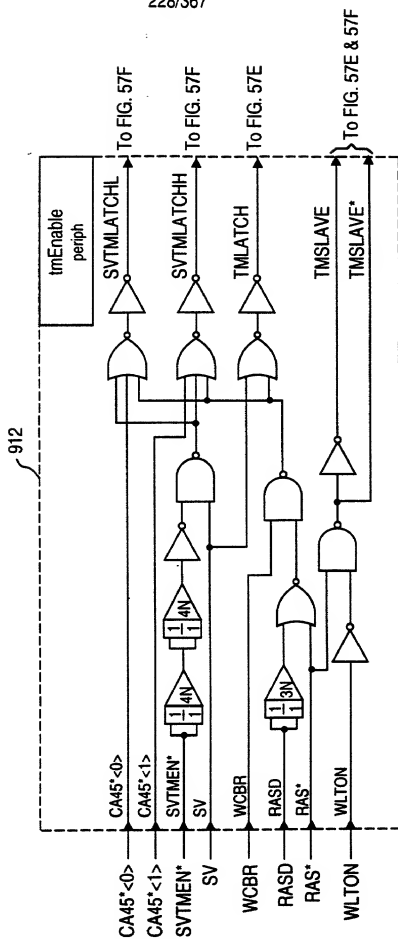


FIG. 57B

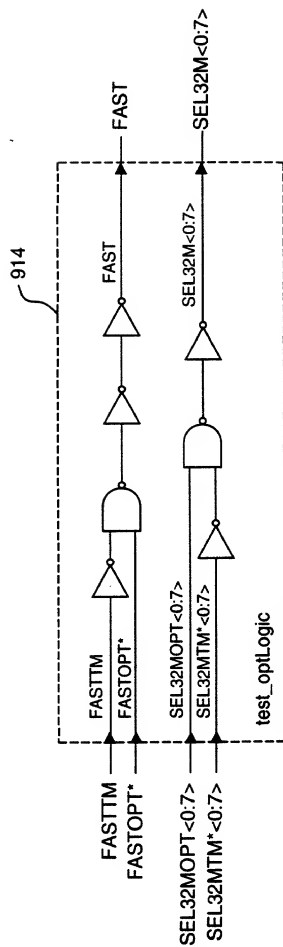
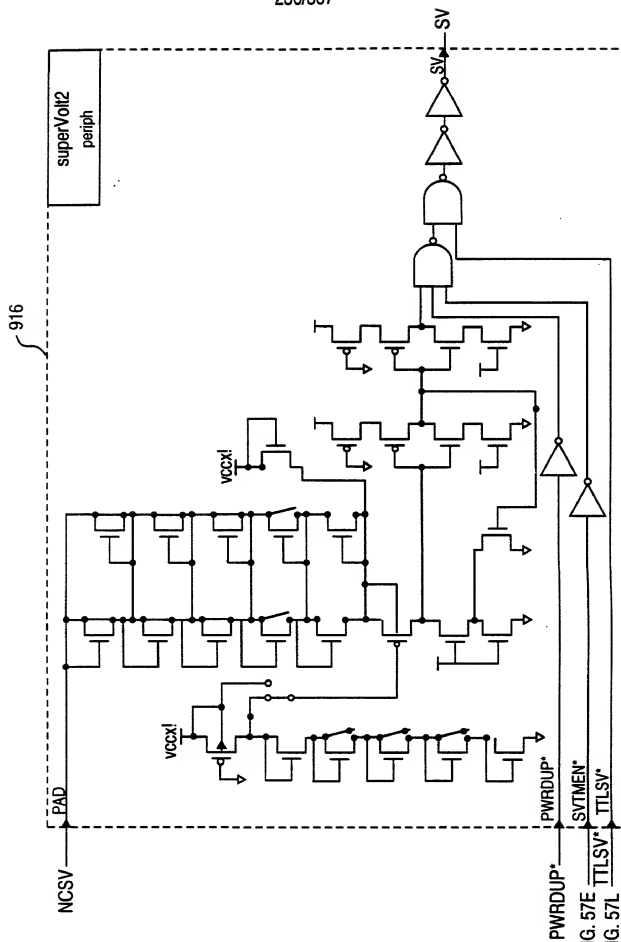


FIG. 57C



From FIG. 57E

From FIG. 57L

FIG. 57D

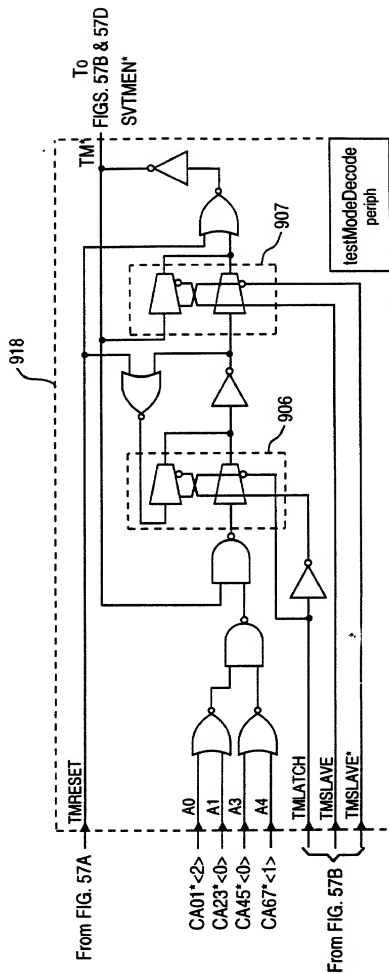


FIG. 57E



FIG. 57F-1

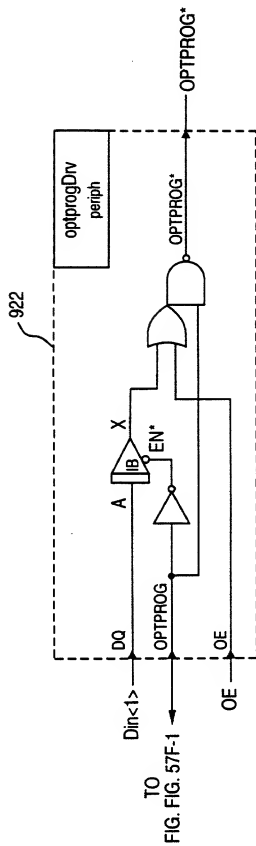


FIG. 57F-2

To

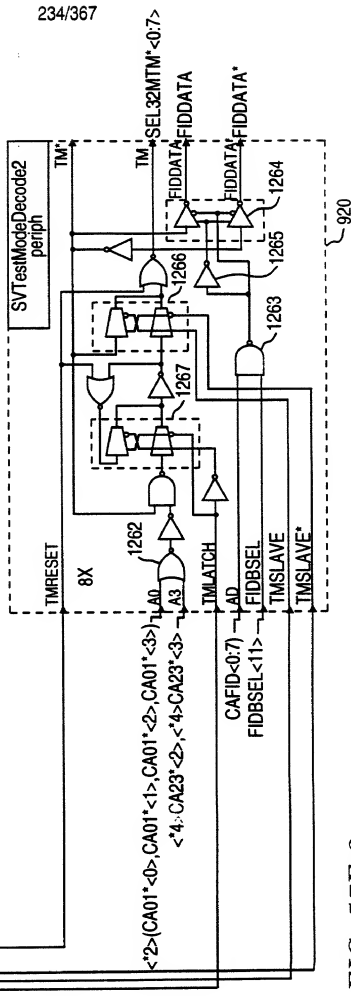


FIG. 57F-3

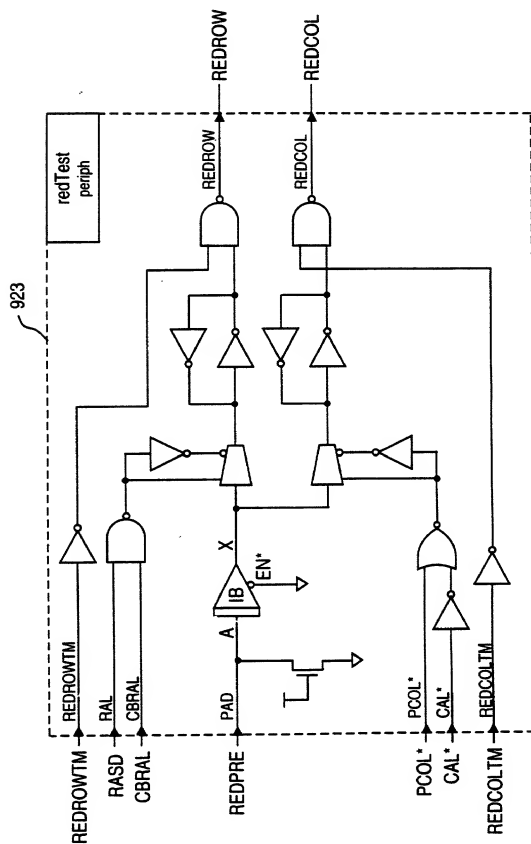
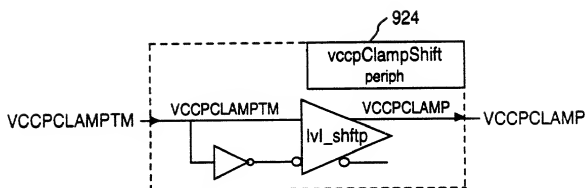
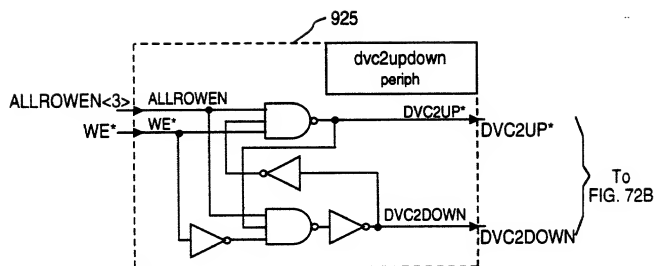
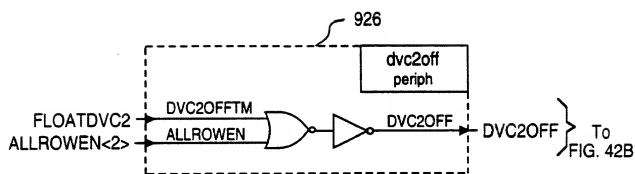
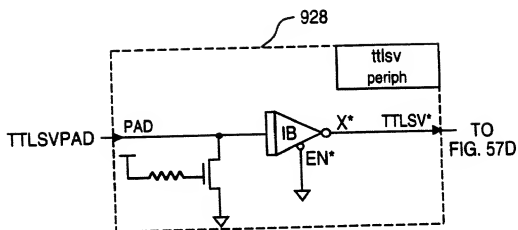


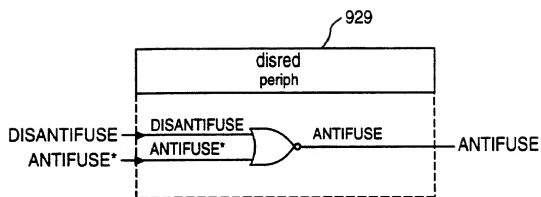
FIG. 57C

**FIG. 57H**

**FIG. 57I**

**FIG. 57J**

**FIG. 57L**

**FIG. 57M**

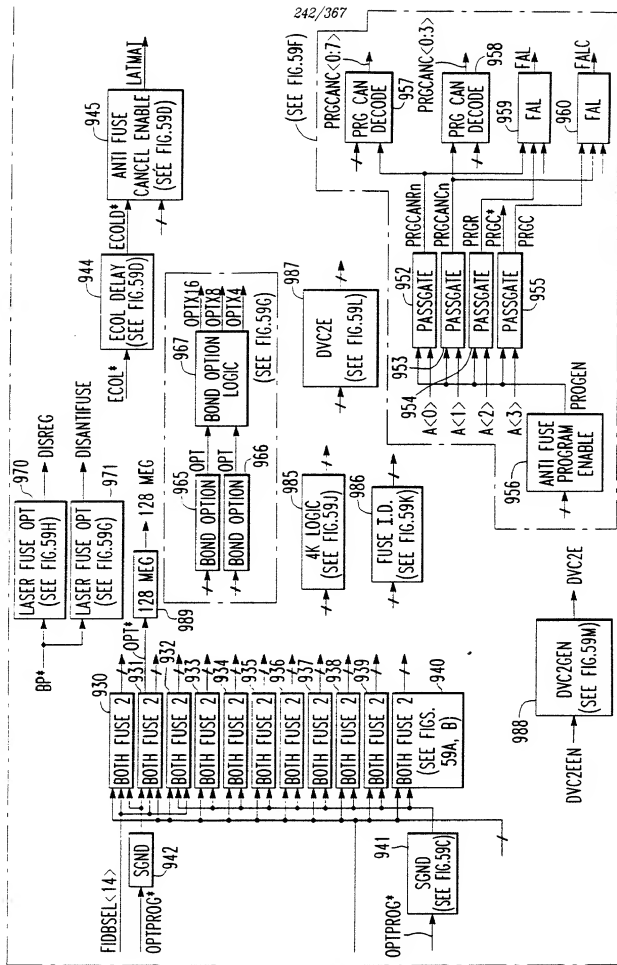


FIG. 58A

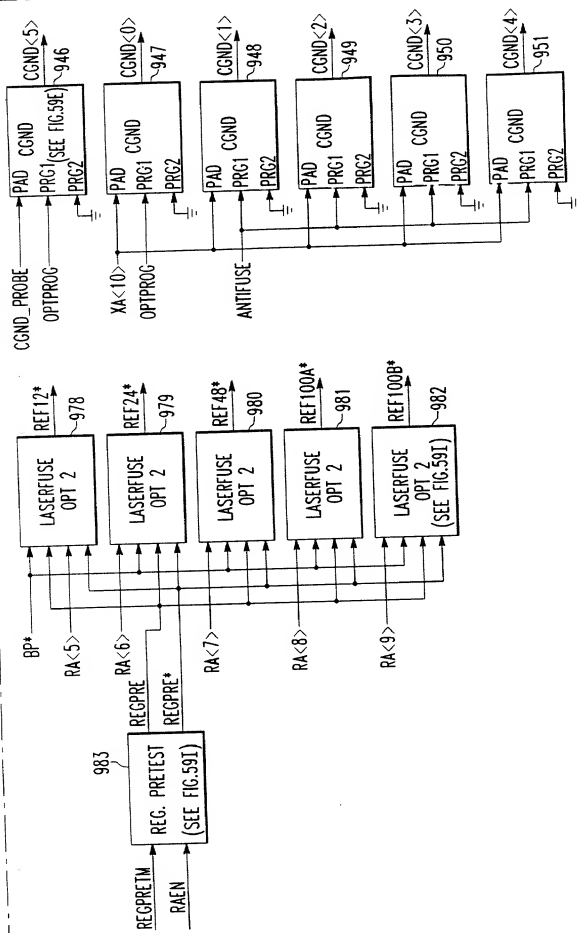
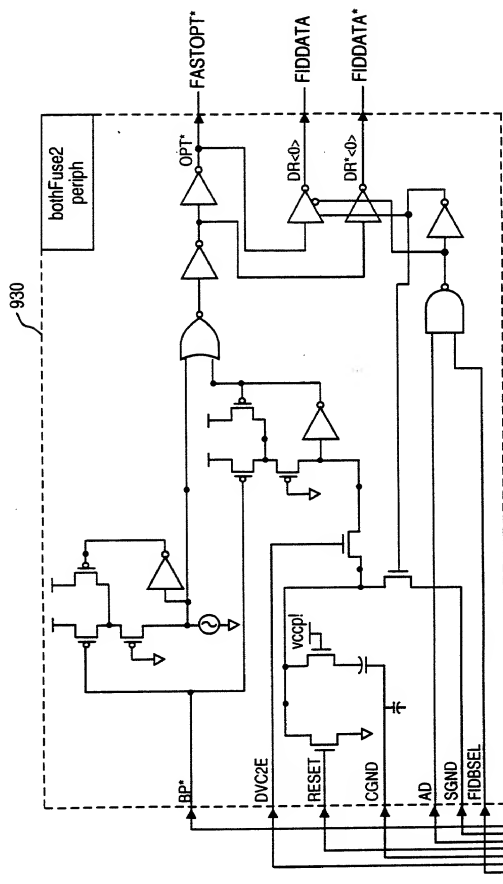
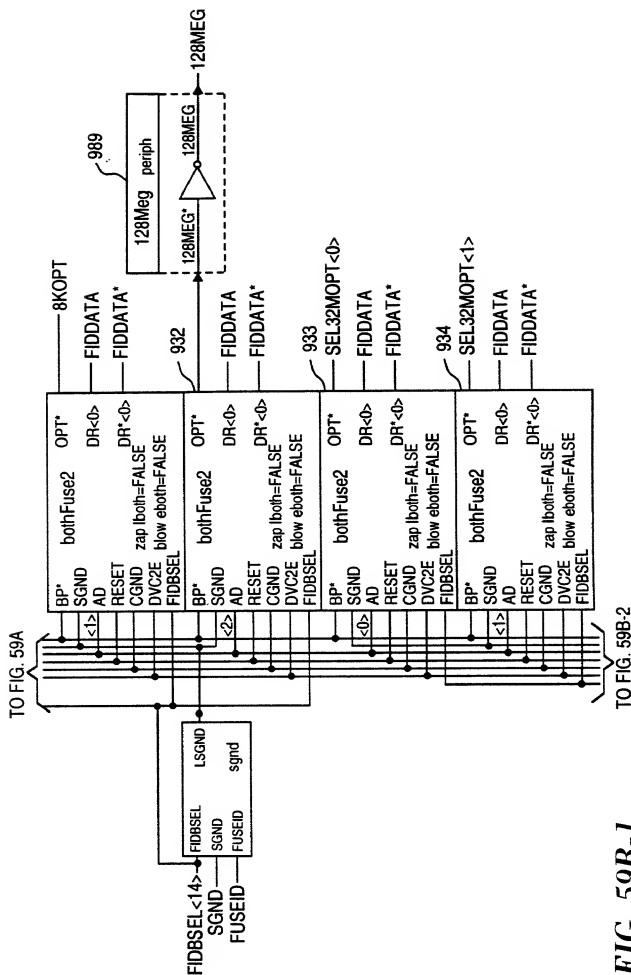


FIG. 58B



To
FIG. 59B

FIG. 59A



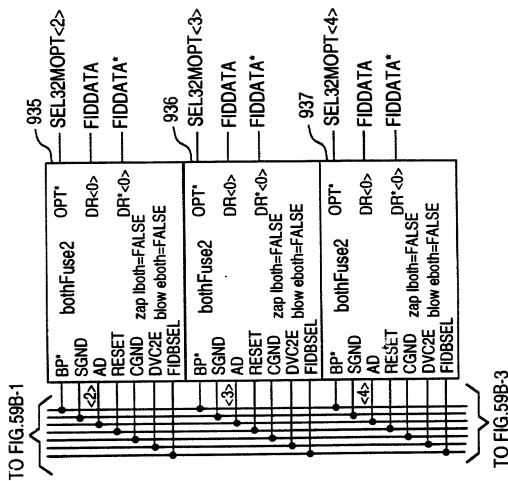


FIG. 59B-2

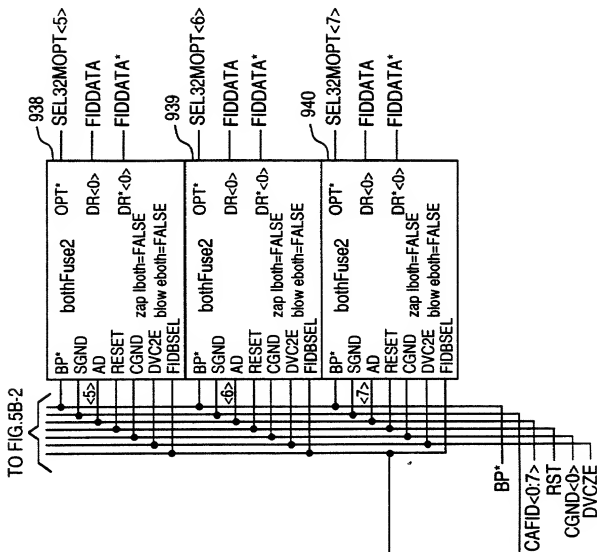
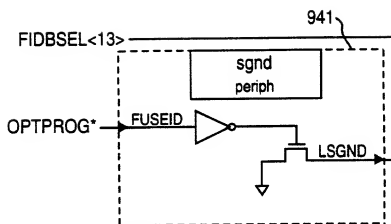


FIG. 59B-3

**FIG. 59C**

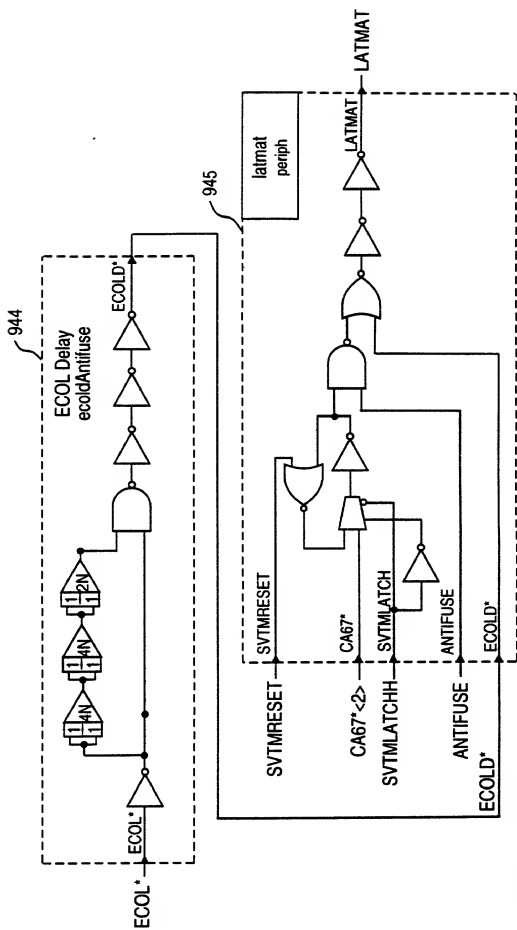


FIG. 59D

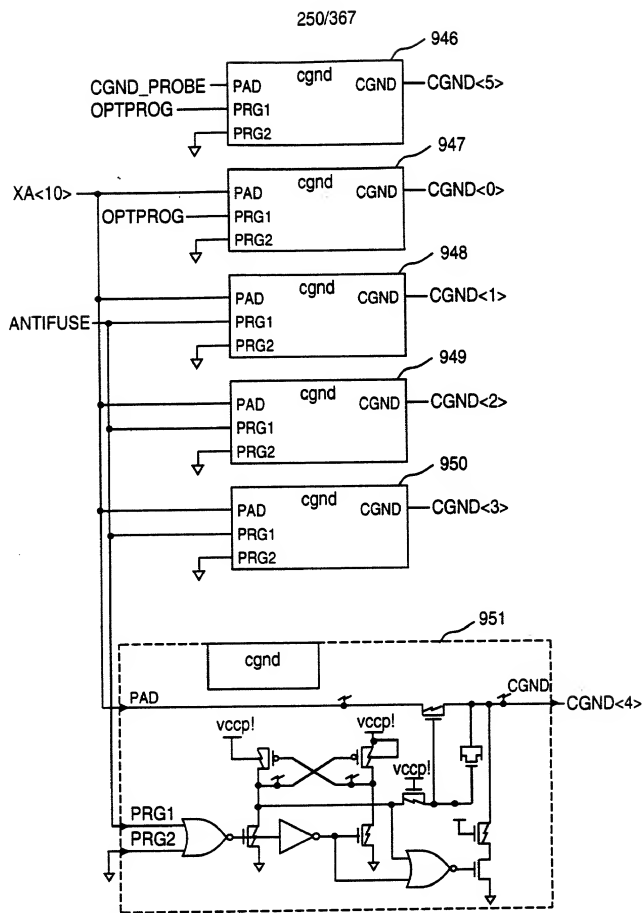


FIG. 59E

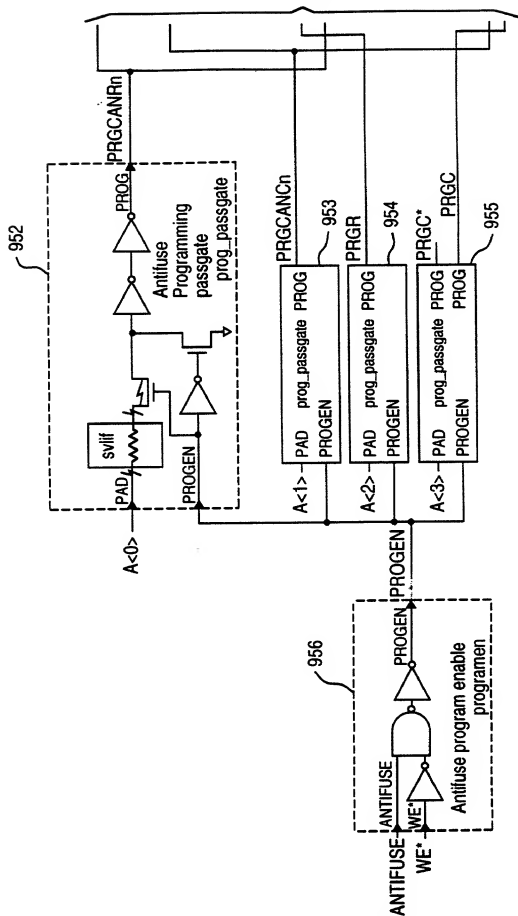


FIG. 59F-1

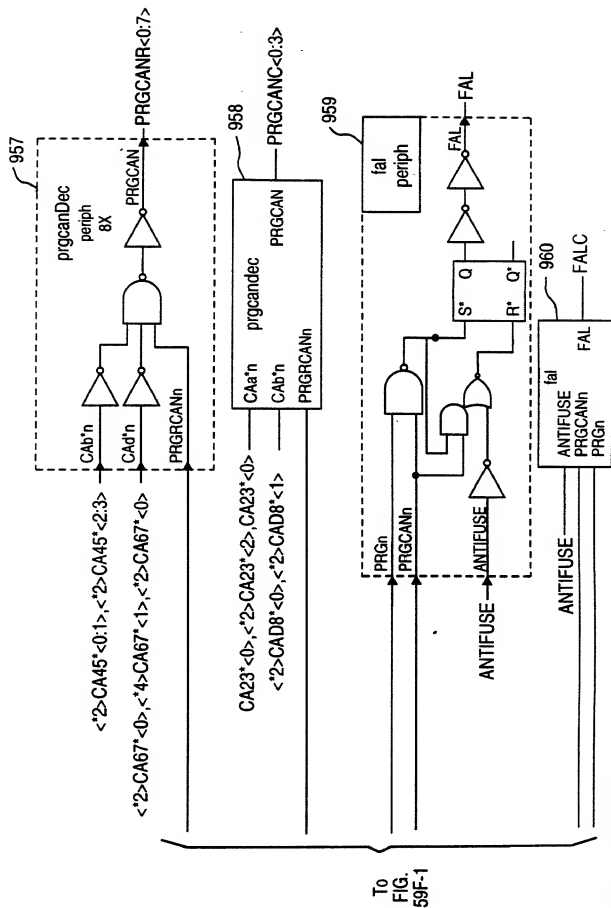


FIG. 59F-2

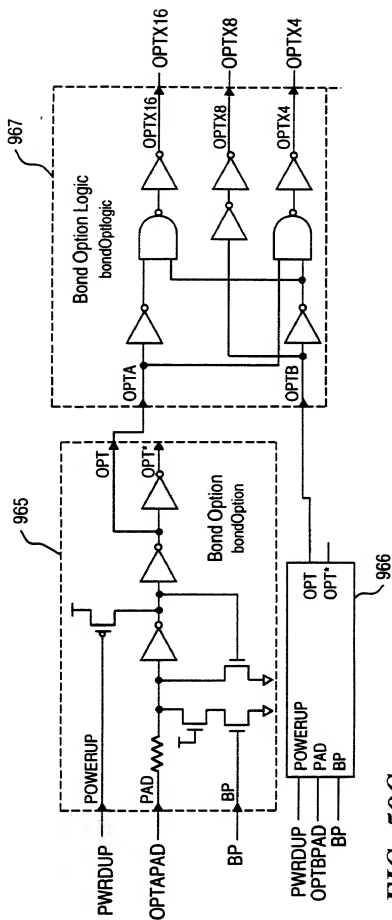


FIG. 59C

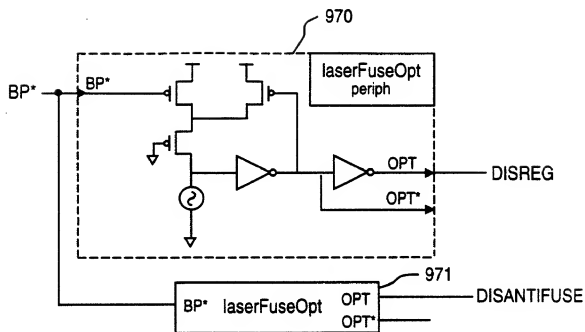


FIG. 59H

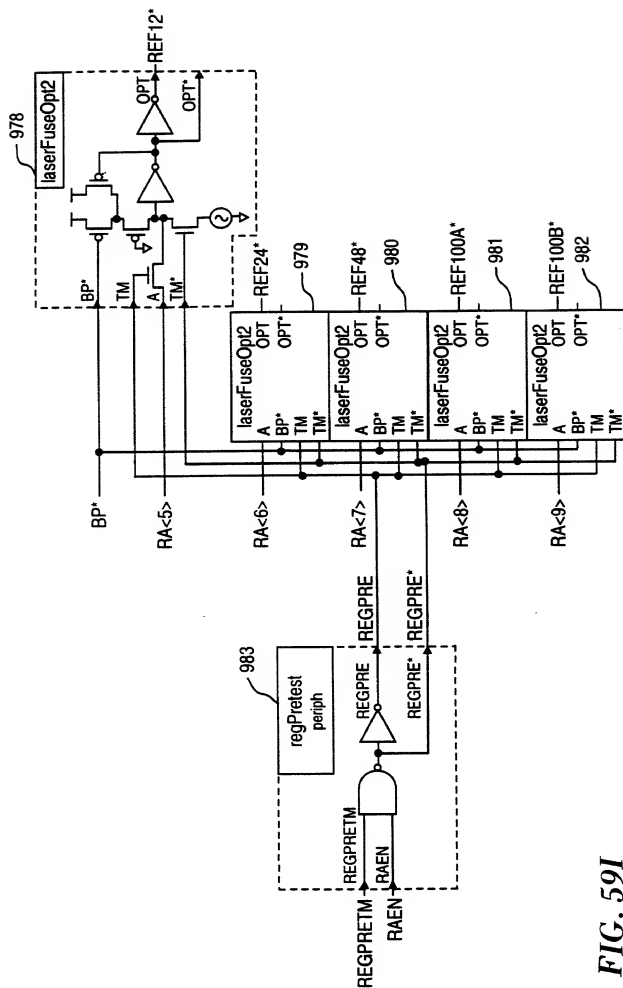
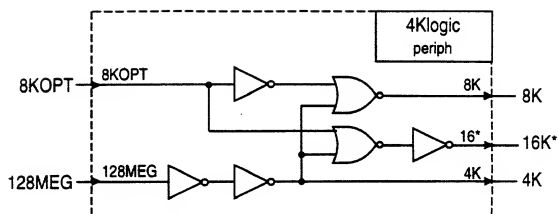
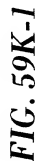
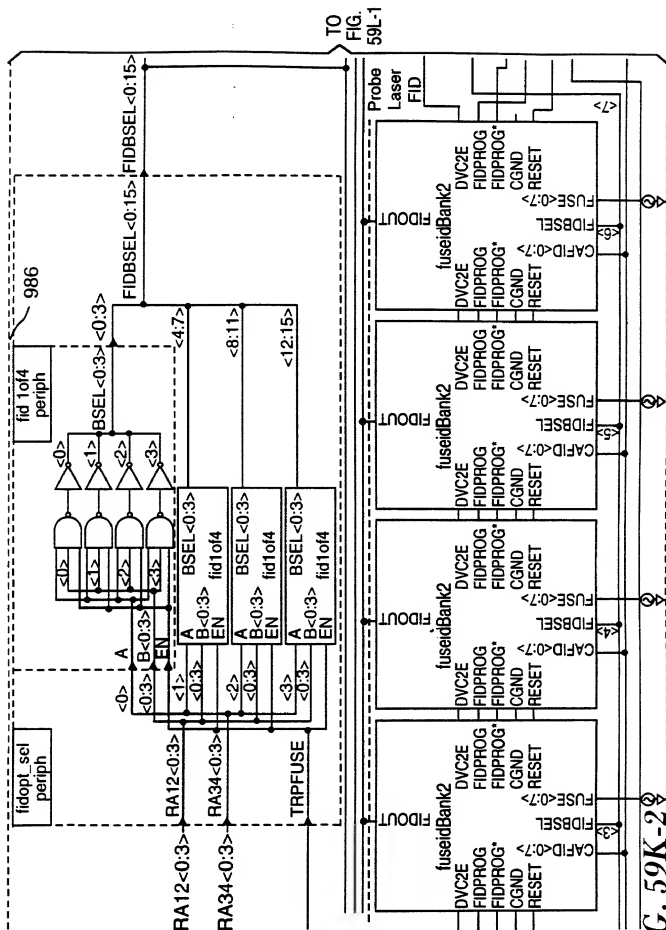


FIG. 59I

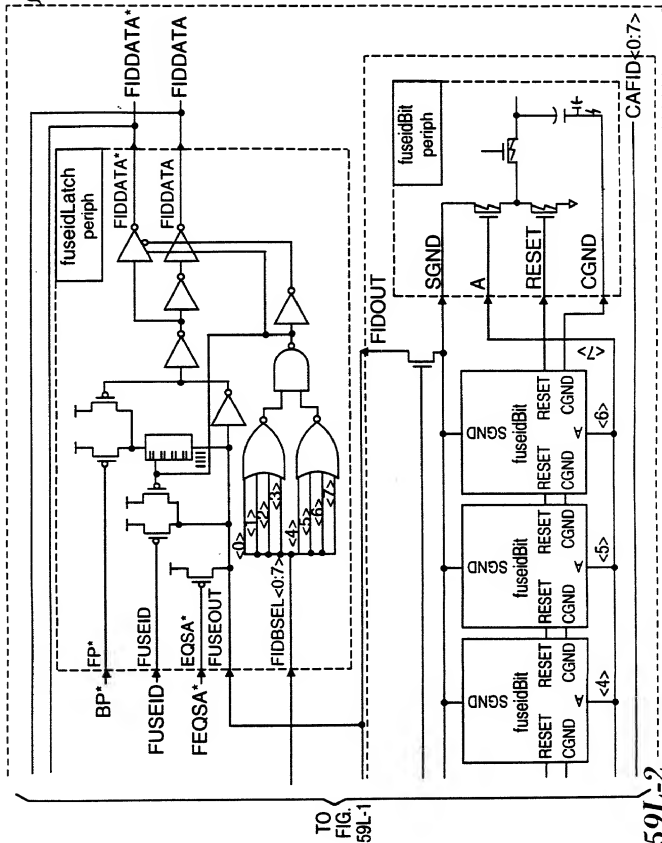
**FIG. 59J**







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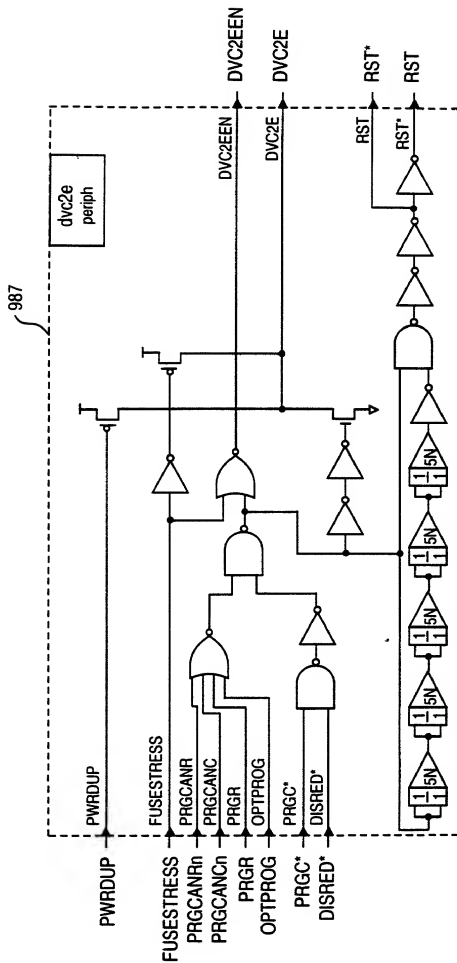
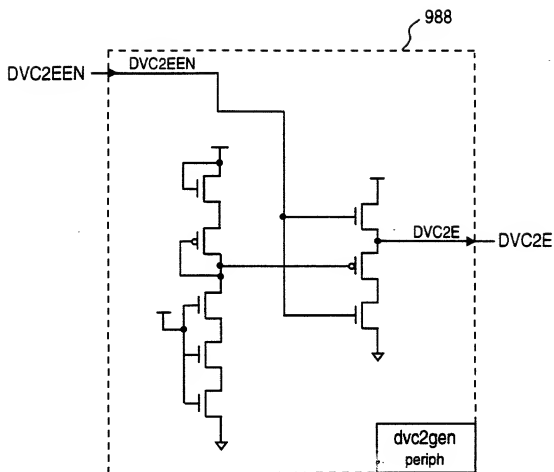
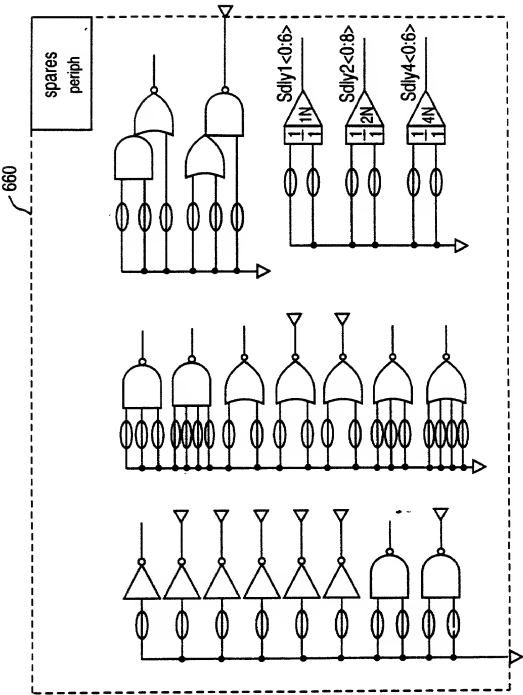


FIG. 59M

**FIG. 59N**

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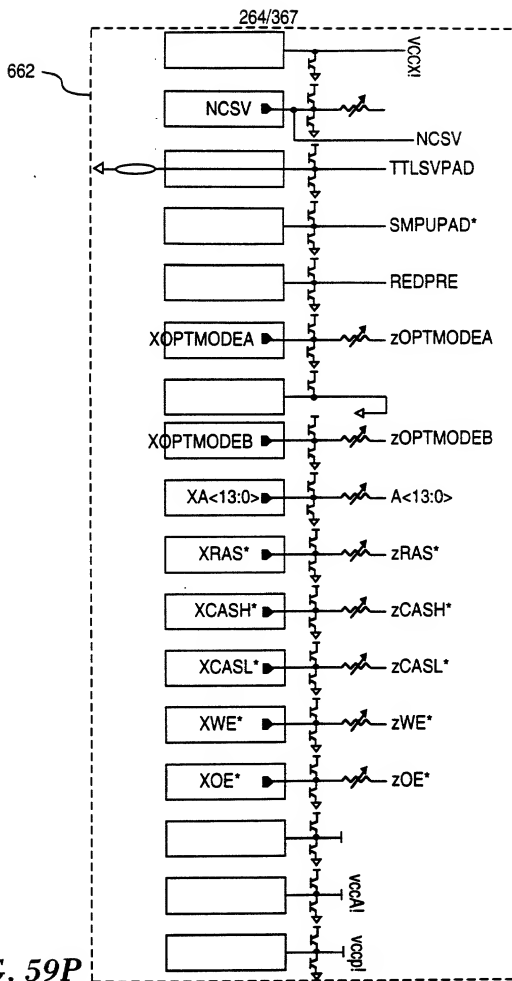


FIG. 59P

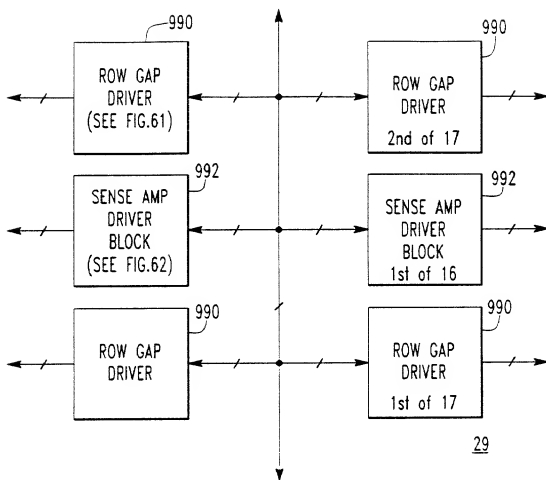


FIG. 60

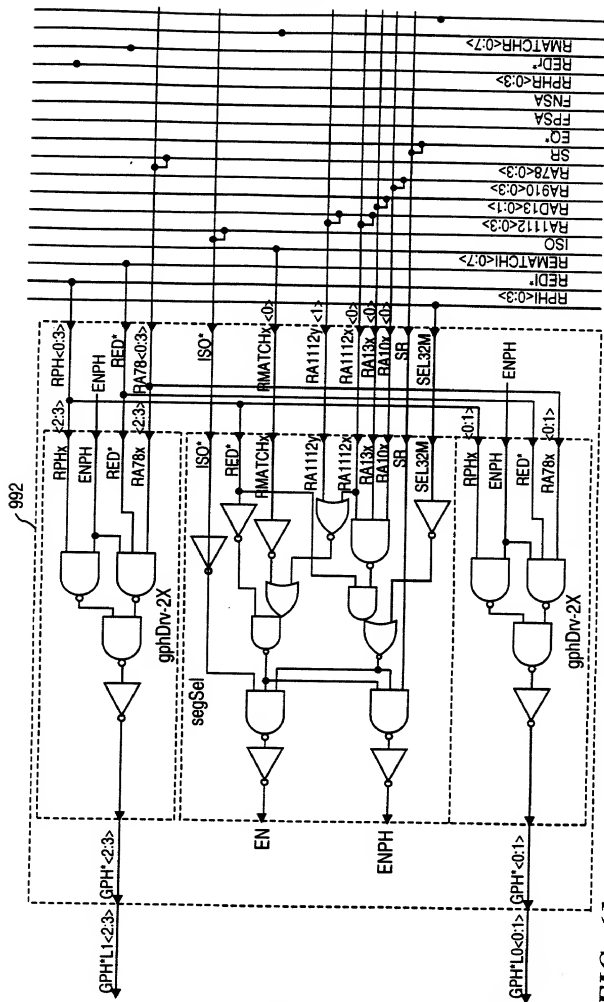


FIG. 61

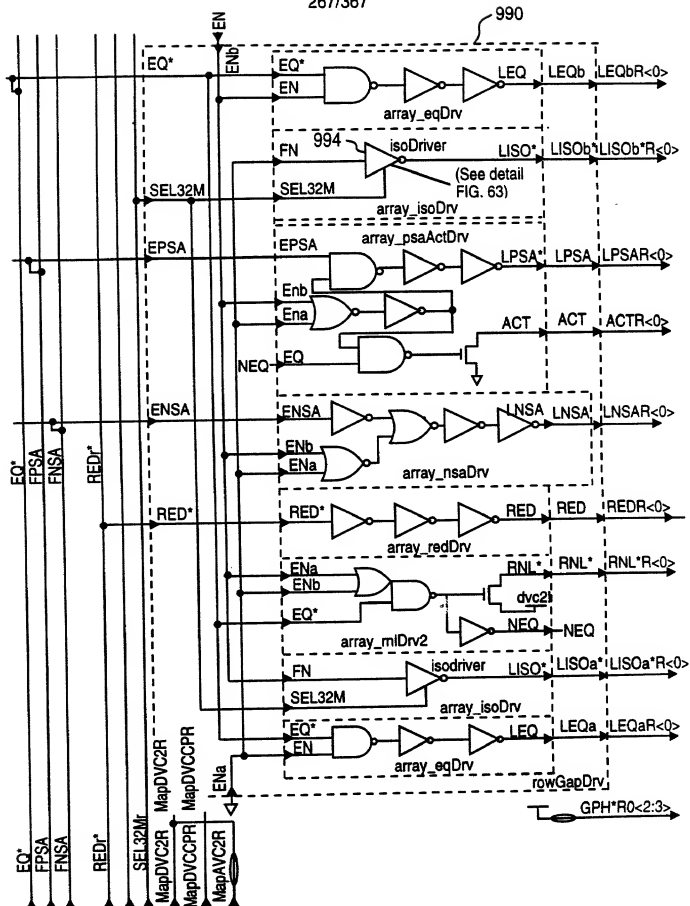


FIG. 62

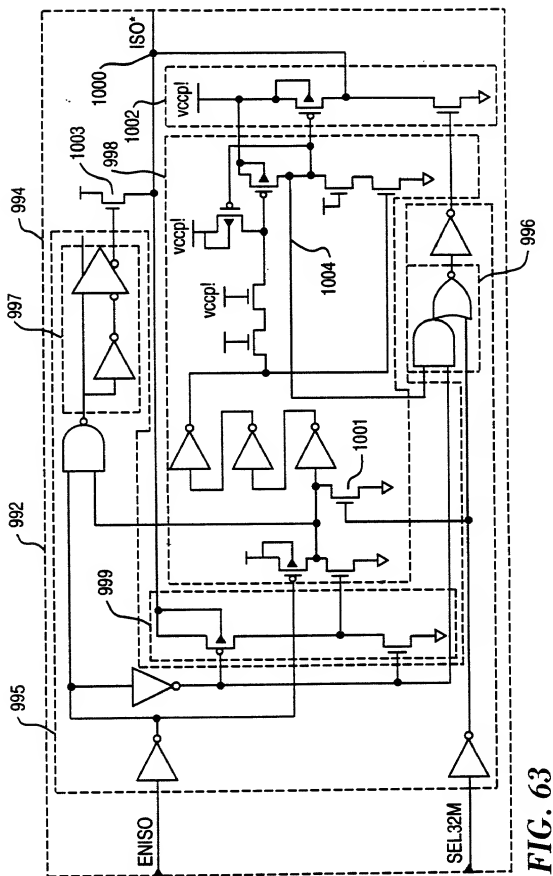


FIG. 63

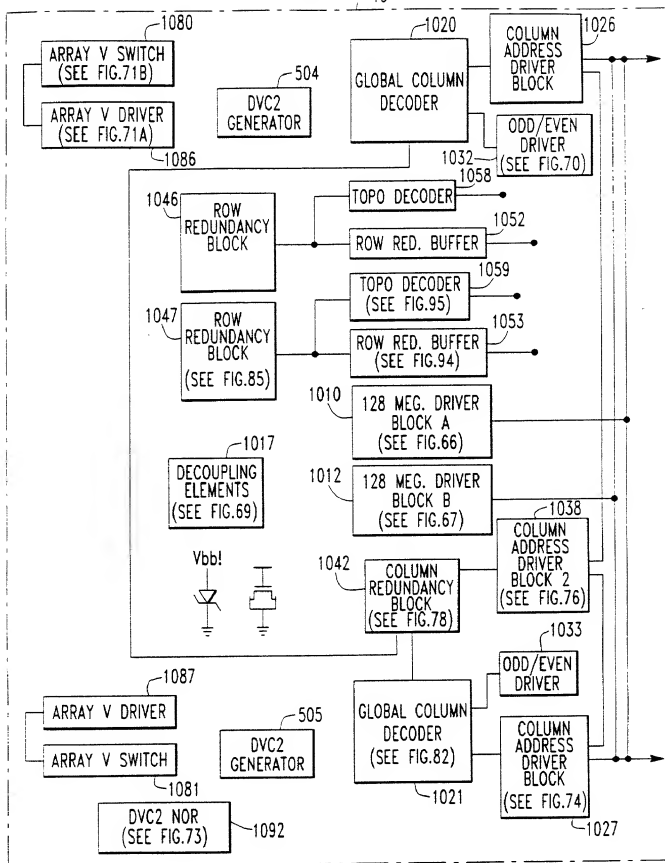


FIG. 64A

069897 66860



FIG. 64B

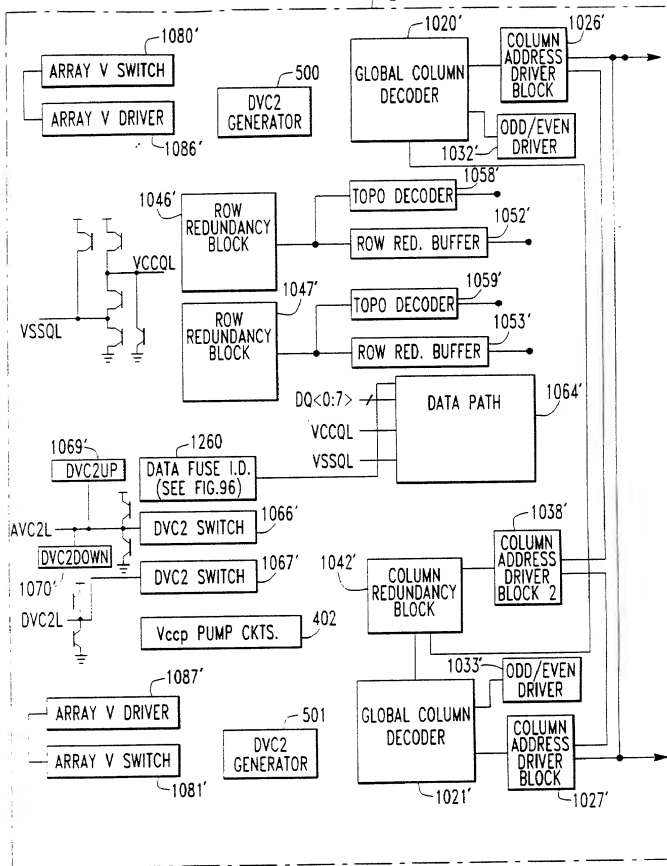


FIG. 65A

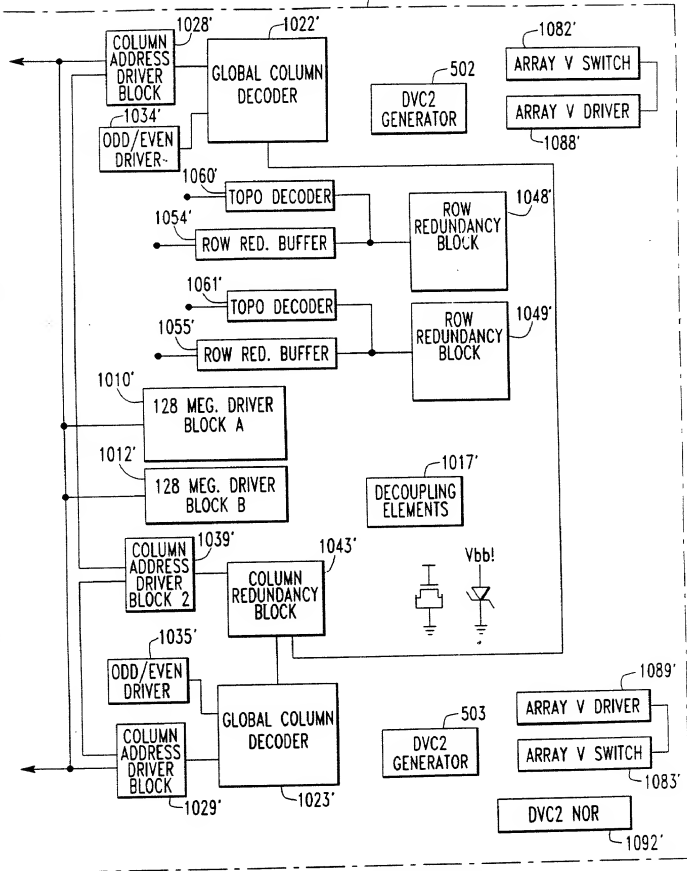
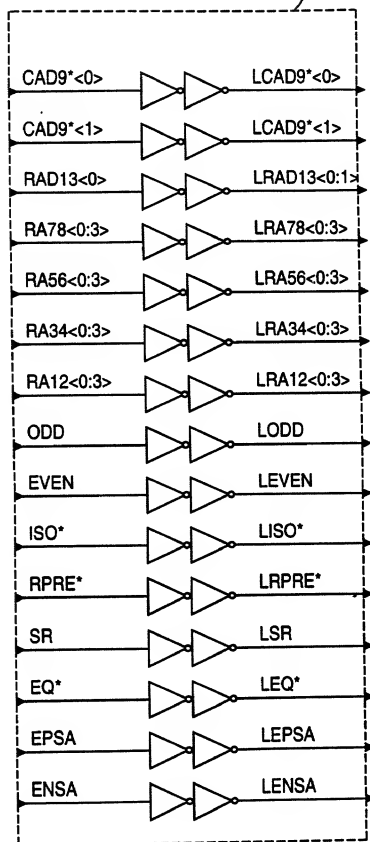


FIG. 65B

**FIG. 66**

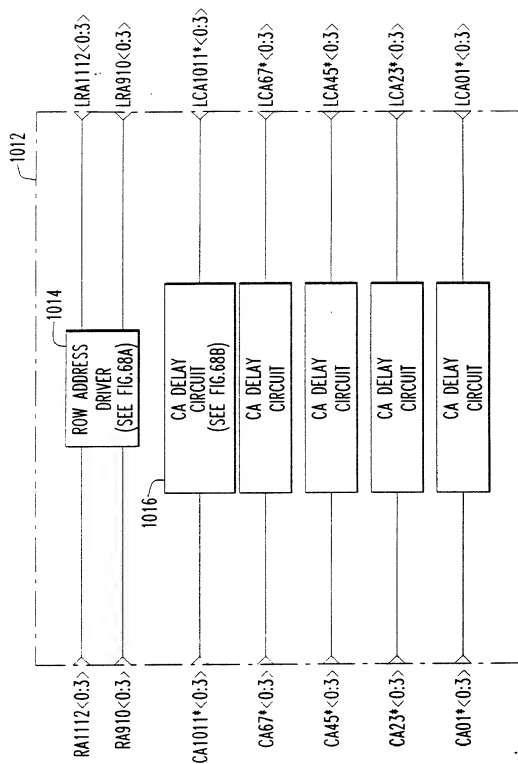


FIG. 67

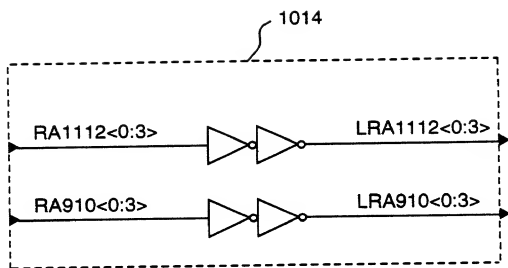
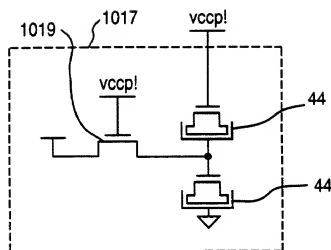
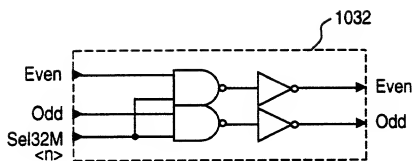
**FIG. 68A**



FIG. 68B

**FIG. 69**

**FIG. 70**

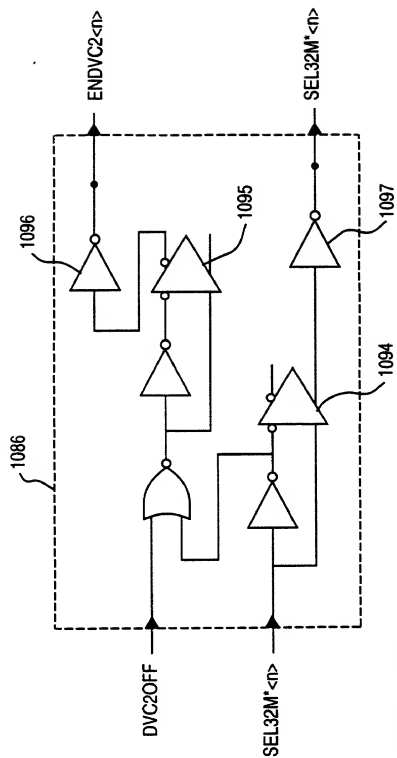


FIG. 71A

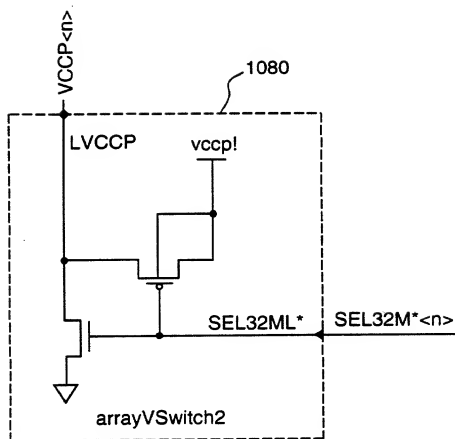


FIG. 71B

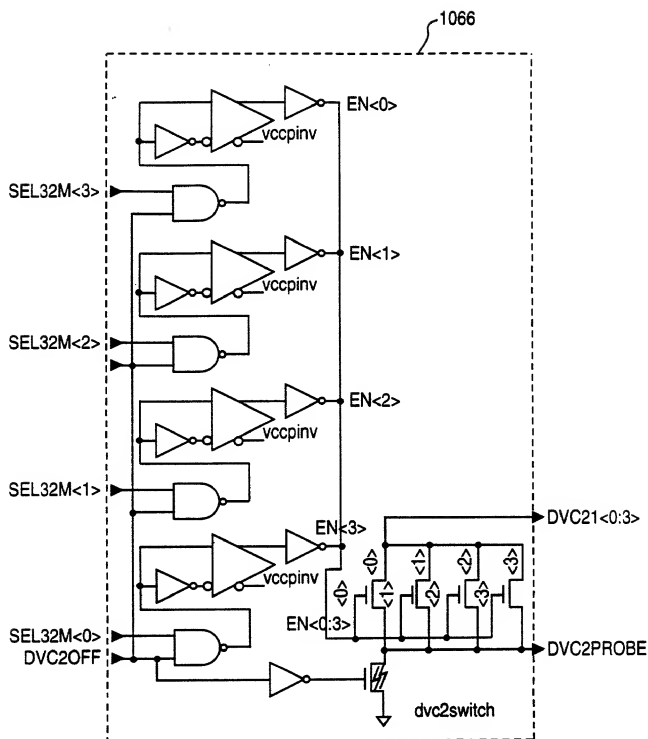
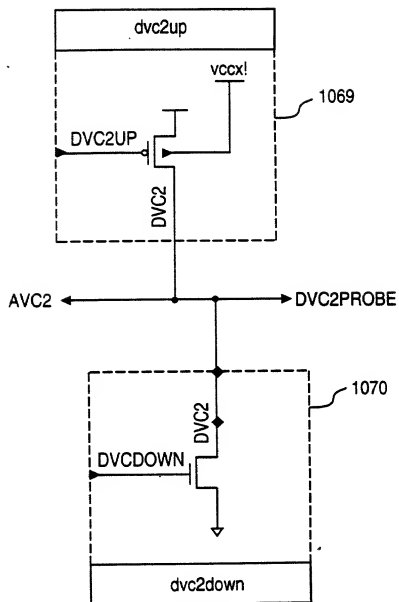
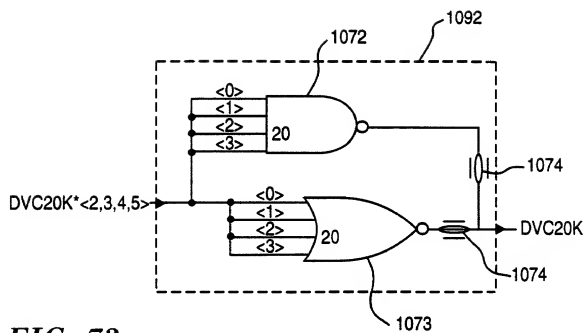


FIG. 72A

**FIG. 72B**

**FIG. 73**

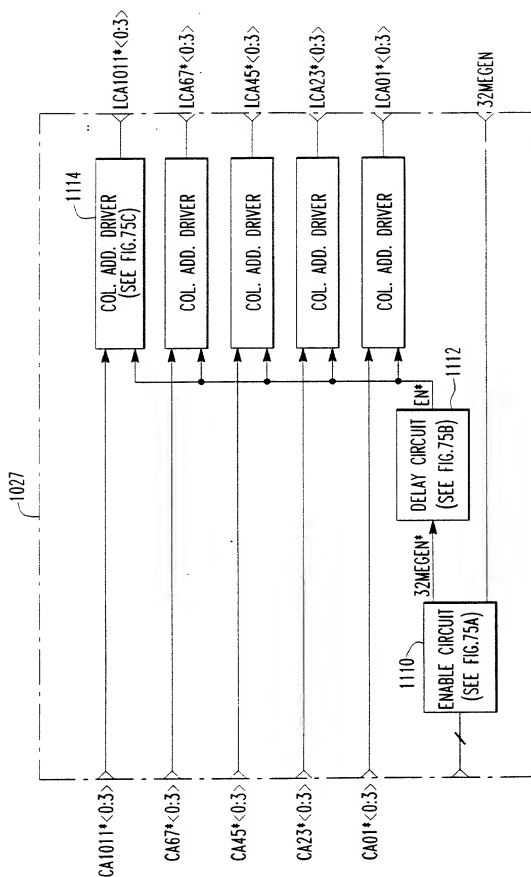


FIG. 74

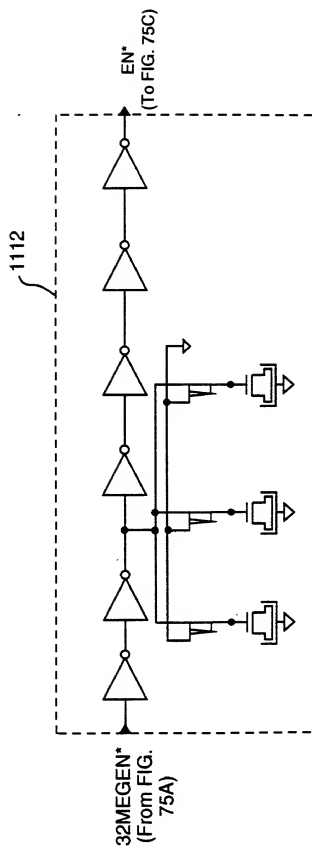


FIG. 75B

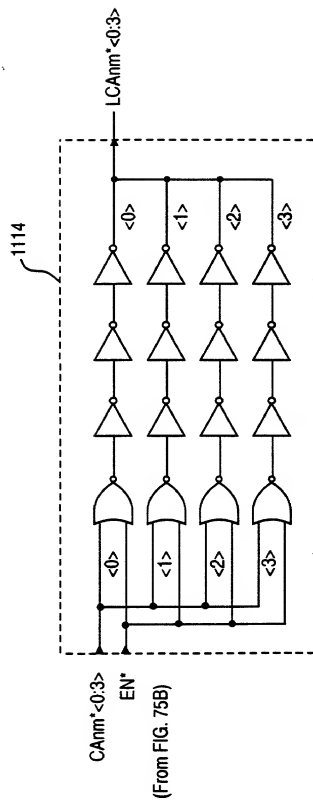


FIG. 75C

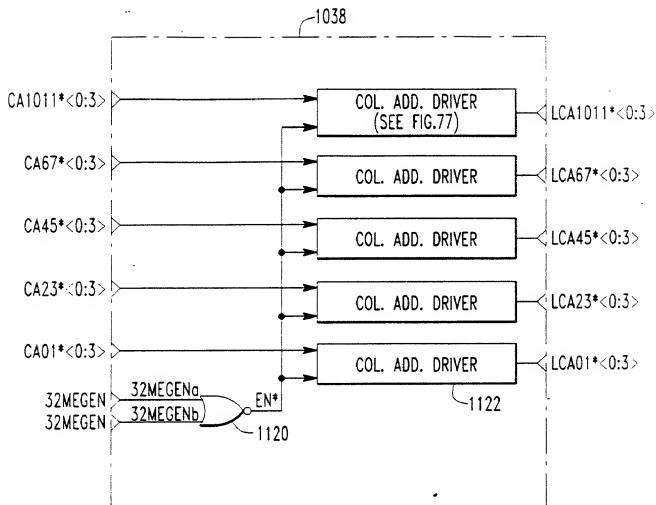


FIG. 76

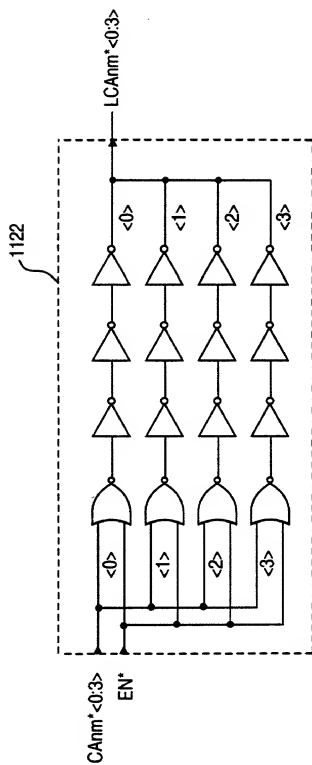


FIG. 77

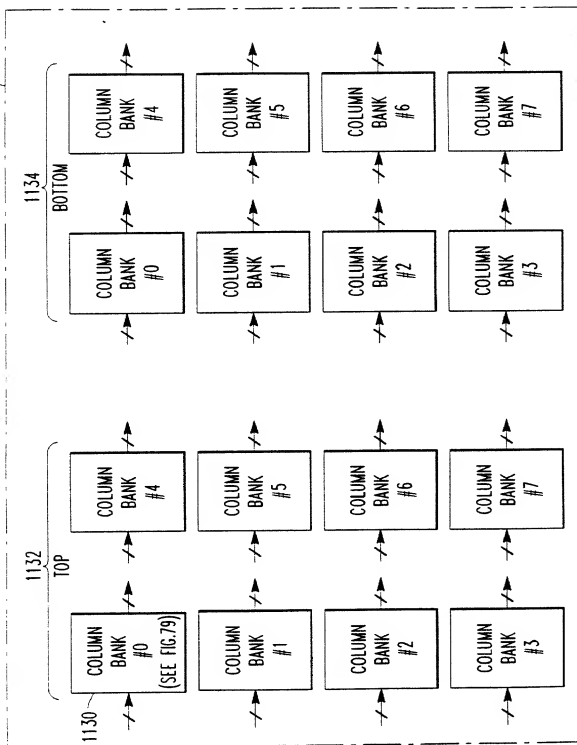


FIG. 78

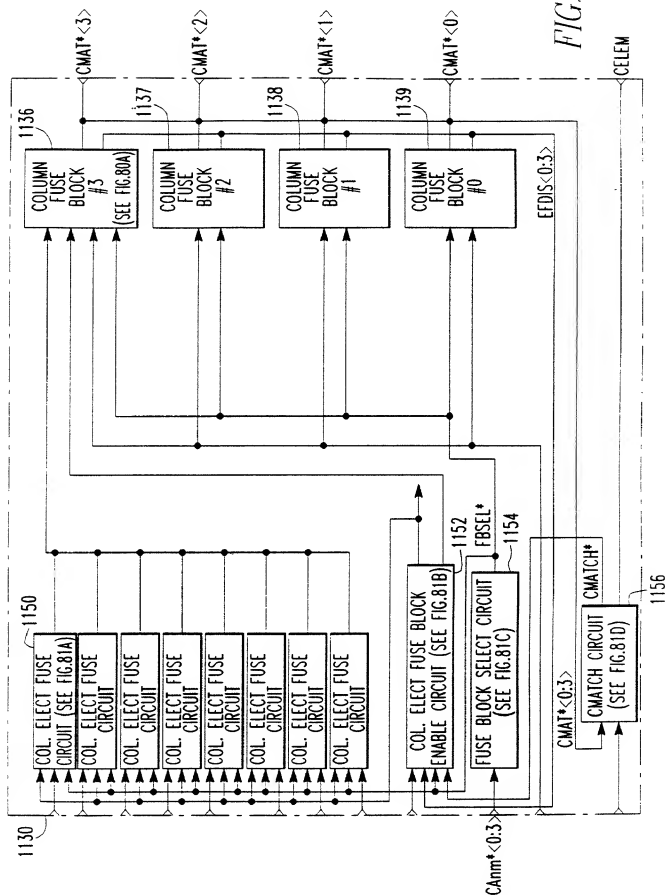


FIG. 79

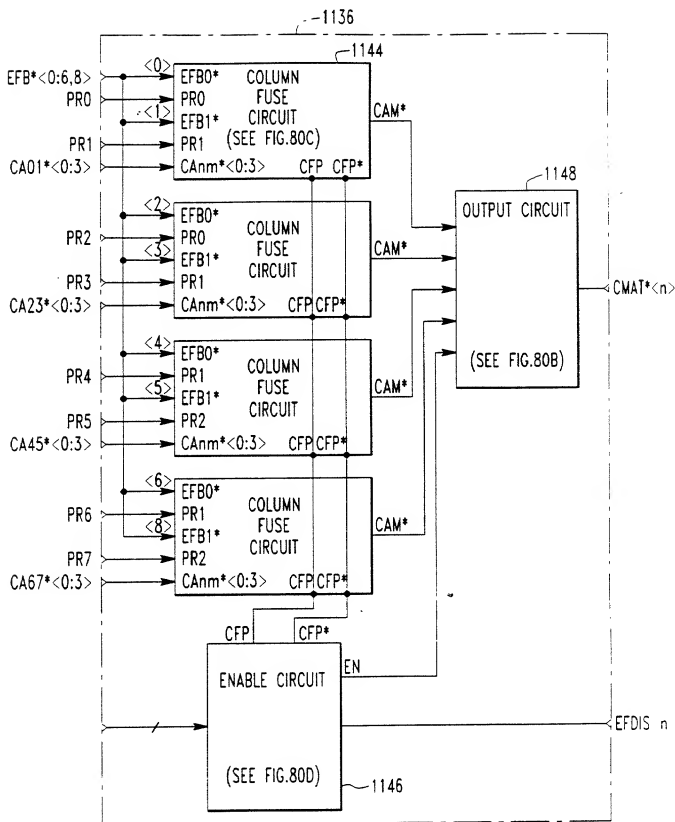
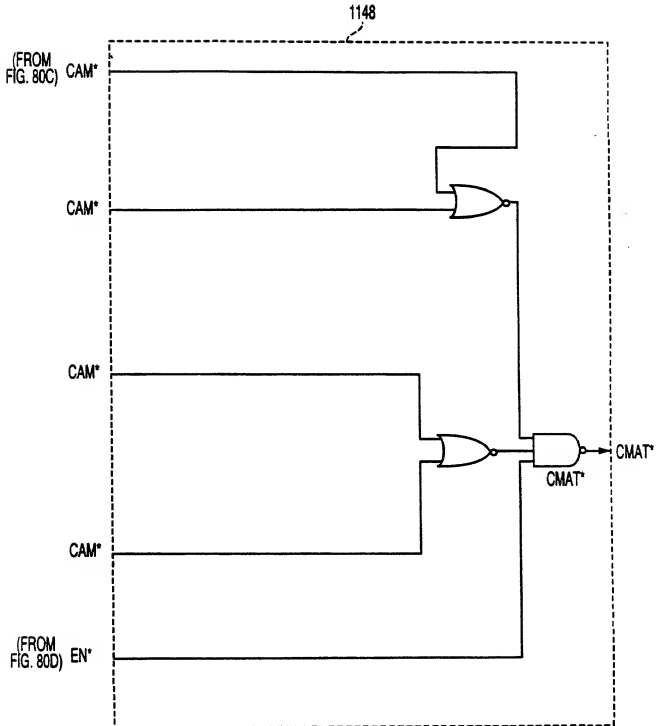


FIG. 80A

**FIG. 80B**

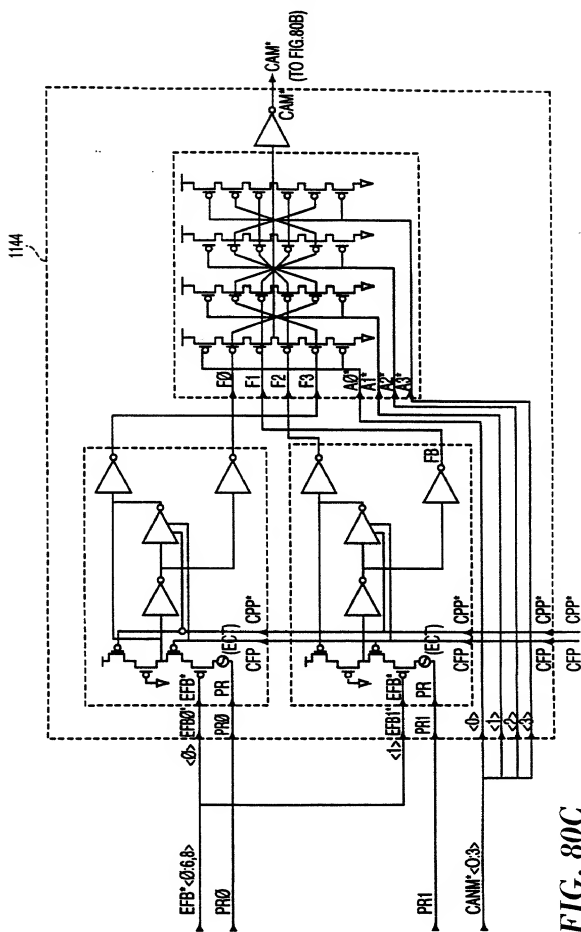


FIG. 80C

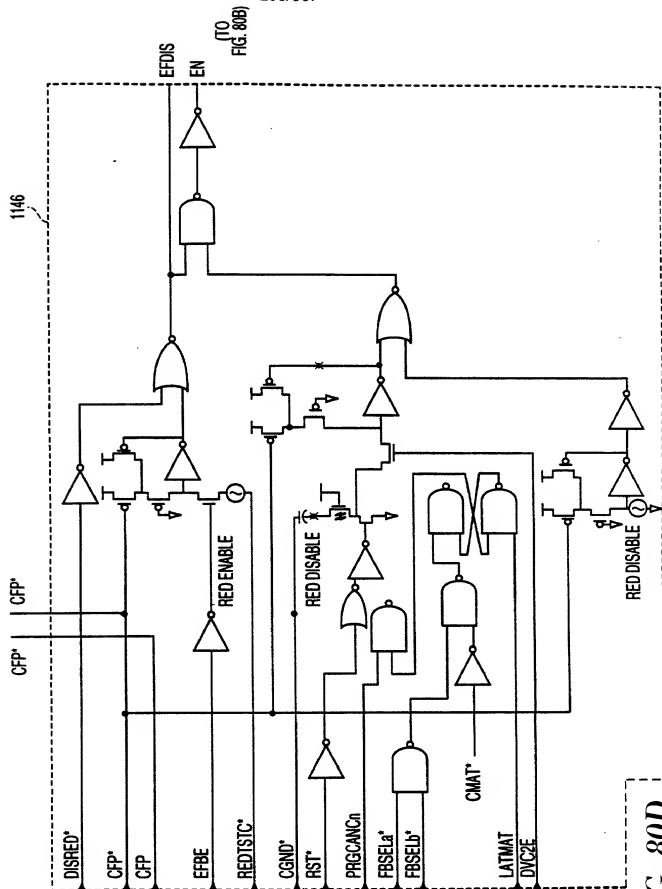


FIG. 80D

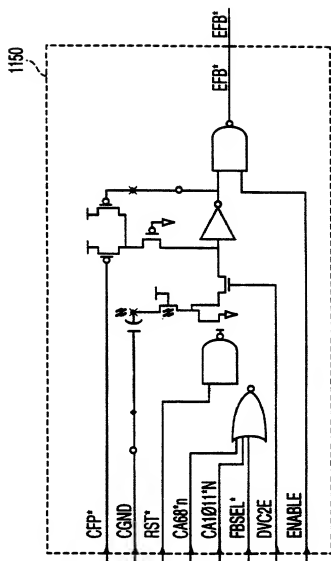


FIG. 81A

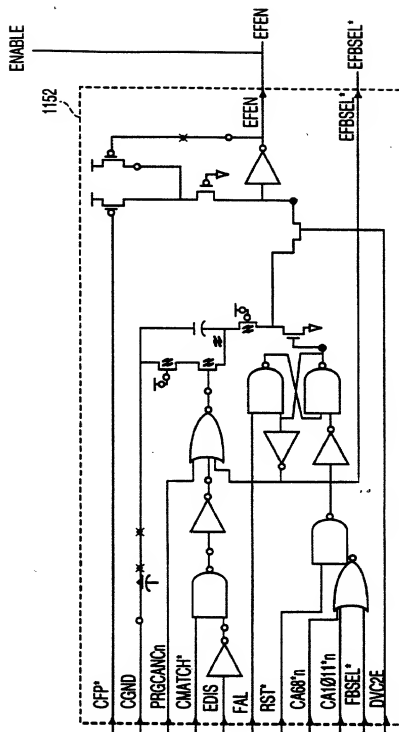
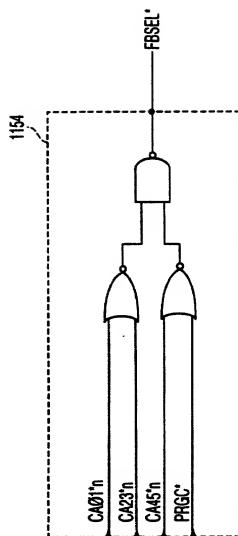


FIG. 81B

**FIG. 81C**

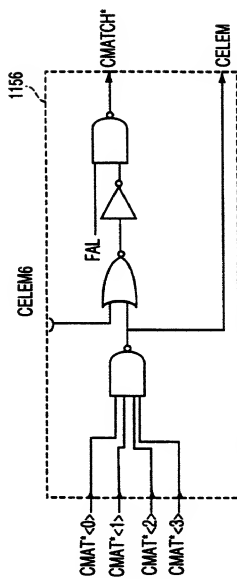
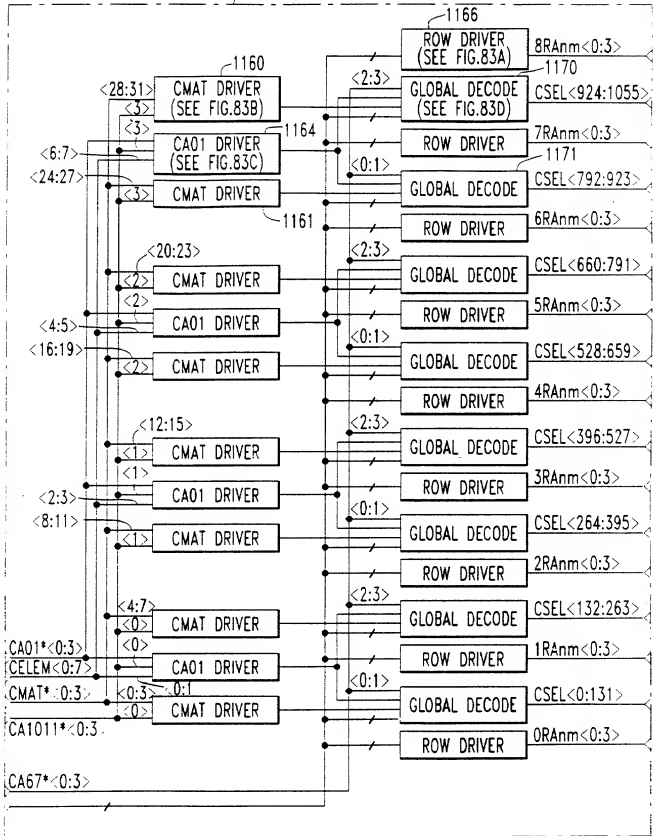


FIG. 81D



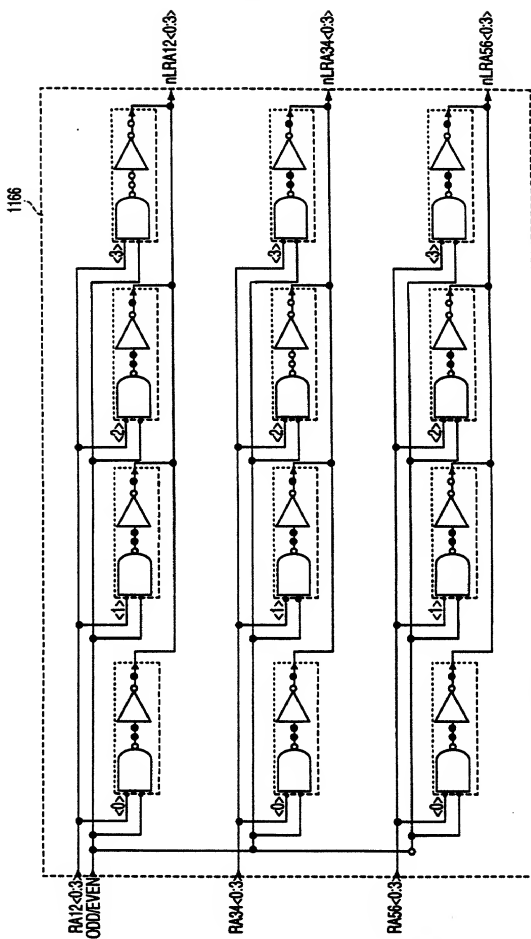


FIG. 83A

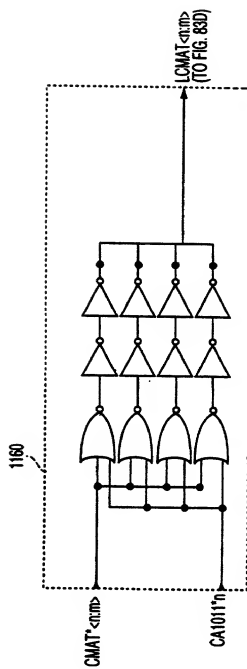


FIG. 83B

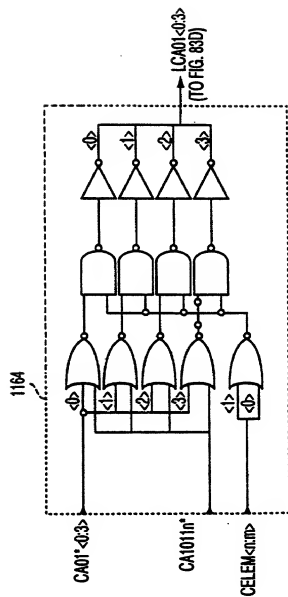


FIG. 83C

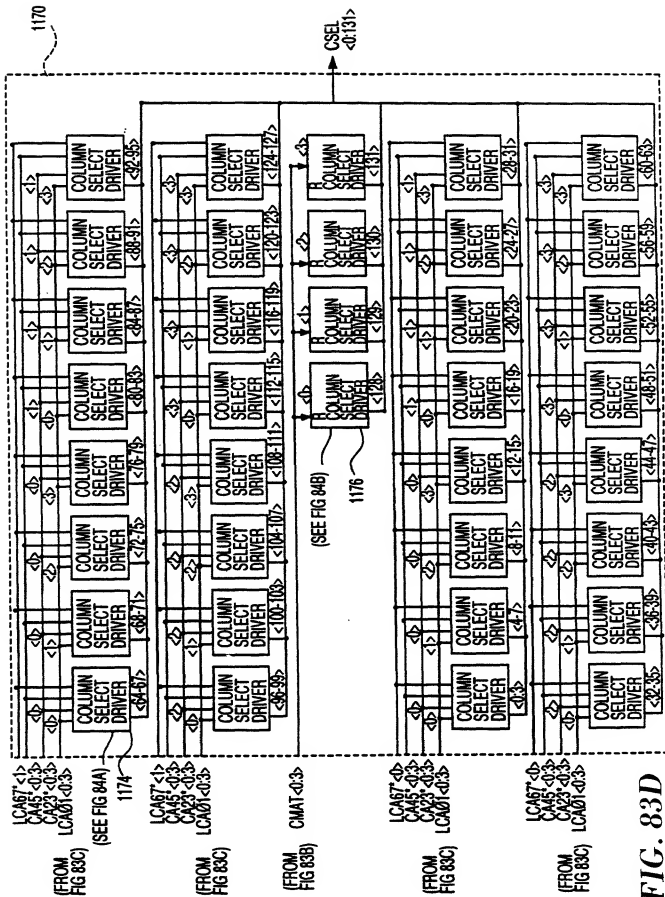


FIG. 83D

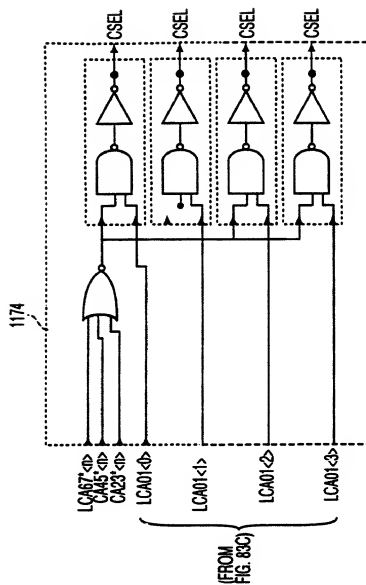
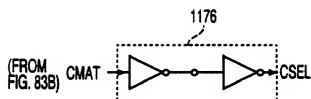


FIG. 84A

**FIG. 84B**

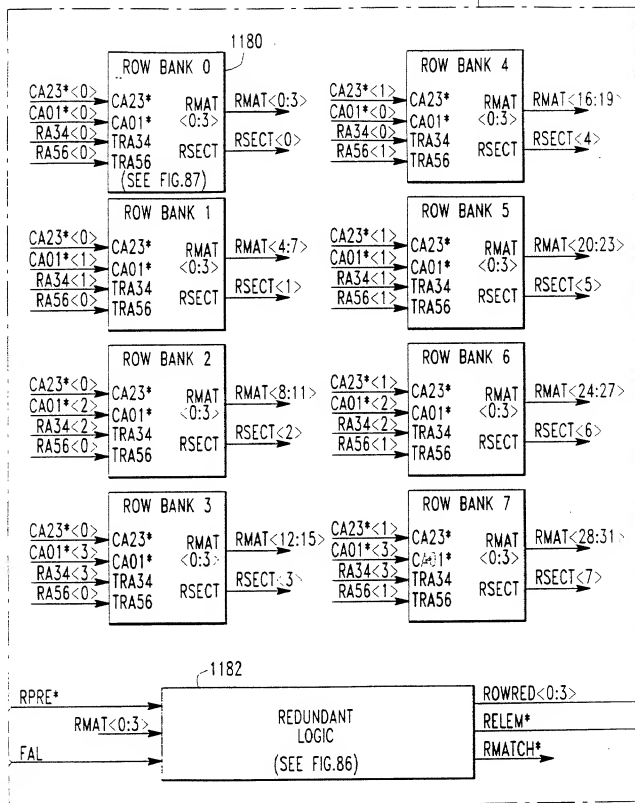


FIG. 85

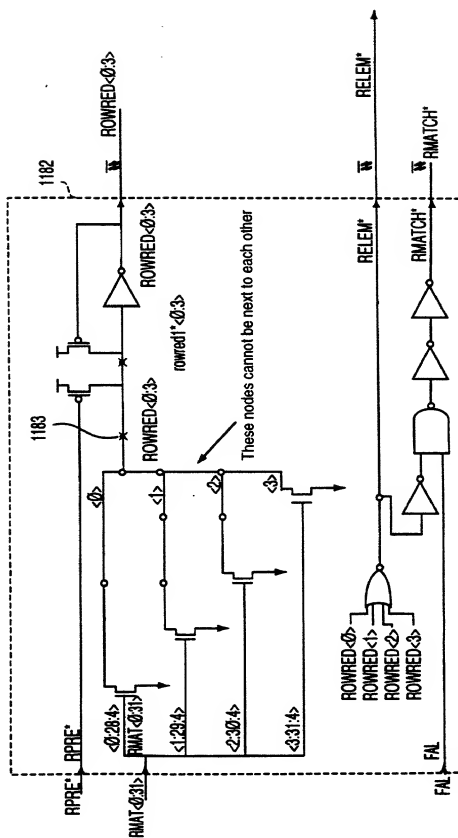


FIG. 86

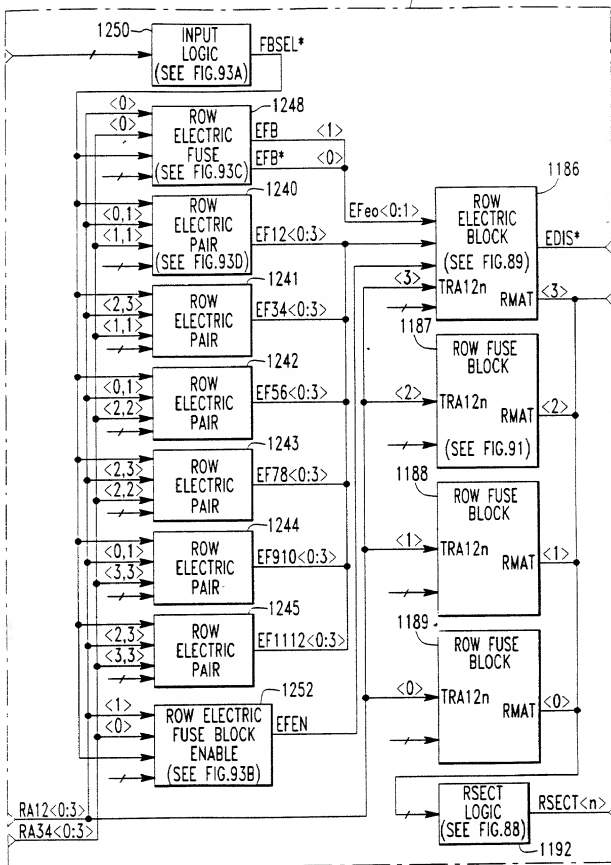
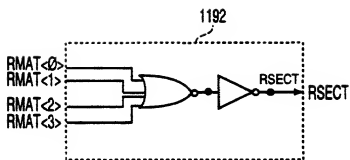


FIG. 87

**FIG. 88**

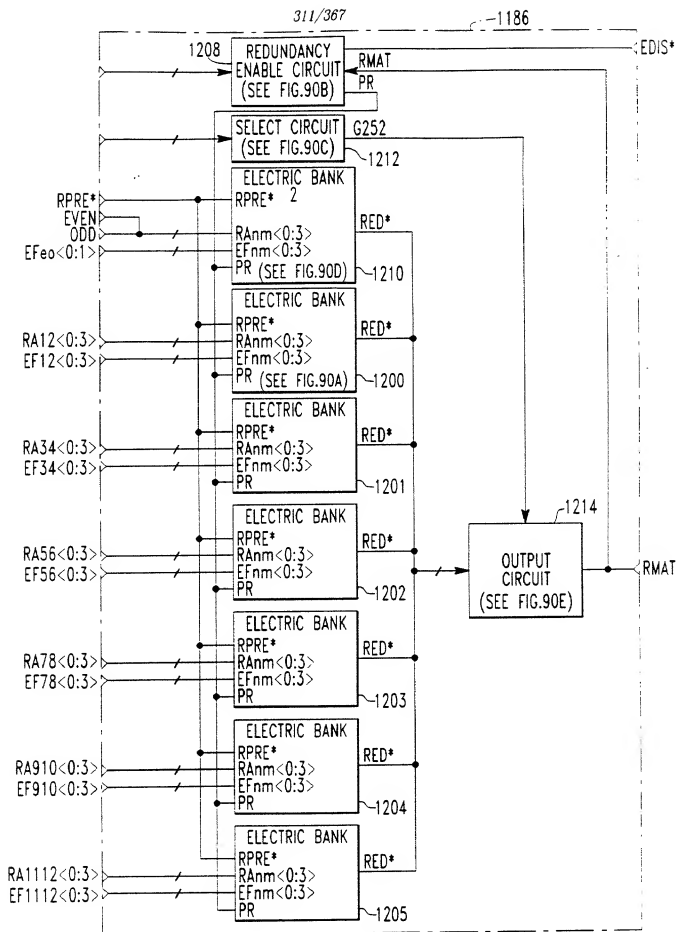


FIG. 89

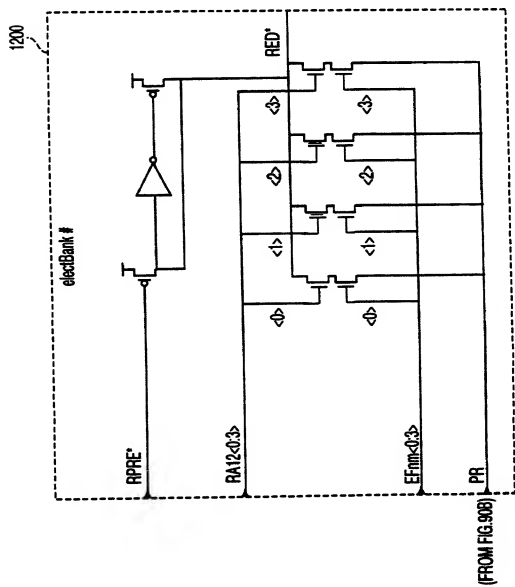


FIG. 90A

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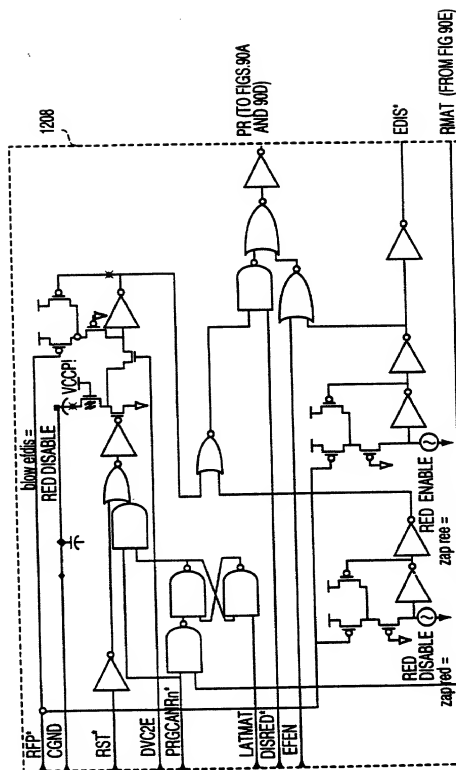


FIG. 90B

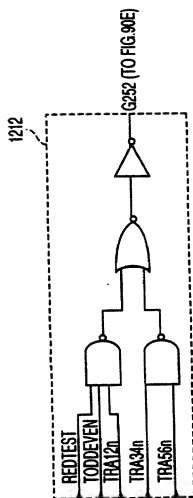


FIG. 90C

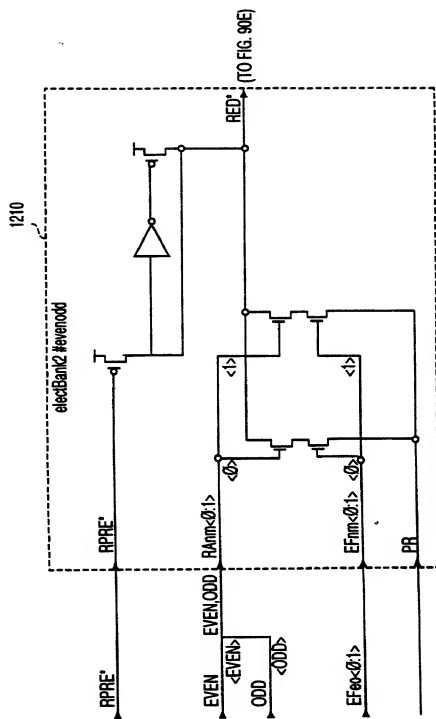


FIG. 90D

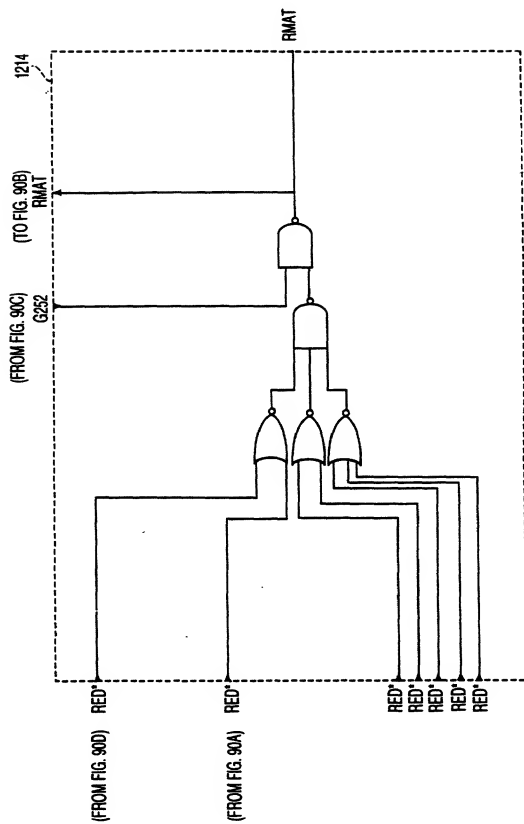


FIG. 90E

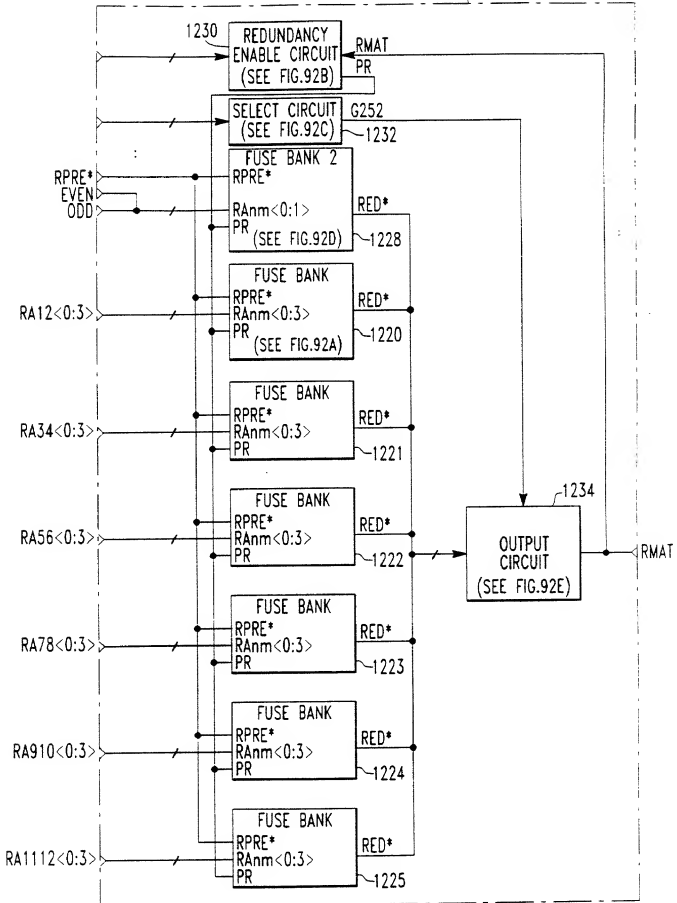


FIG. 91

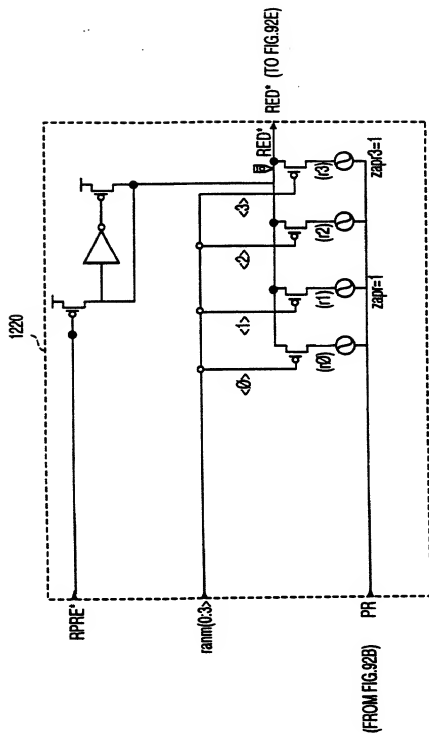


FIG. 92A

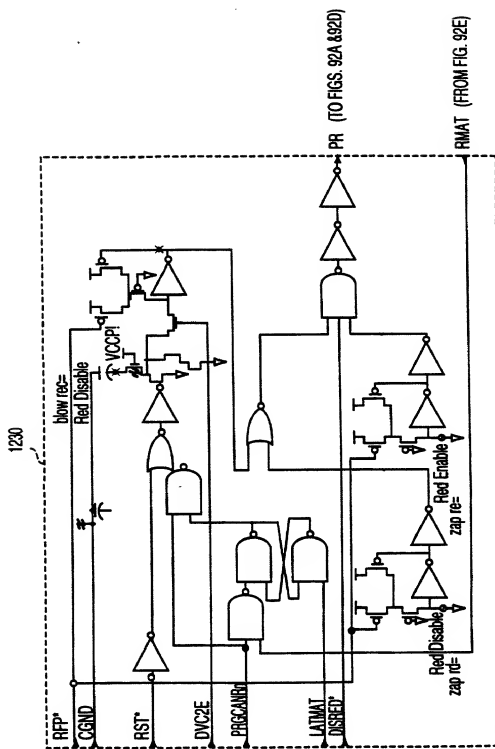


FIG. 92B

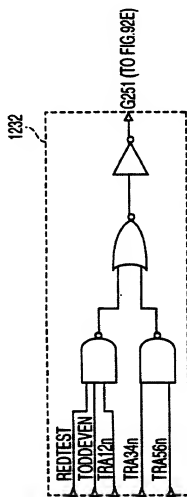


FIG. 92C

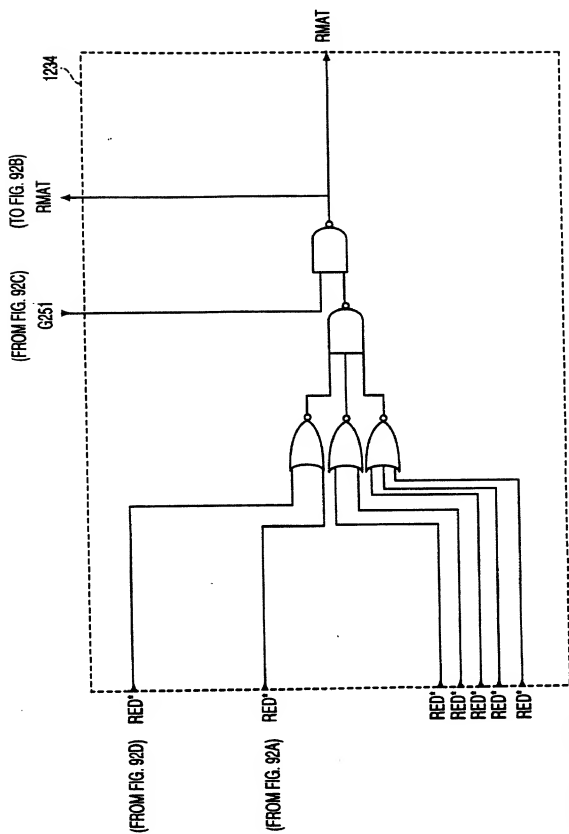
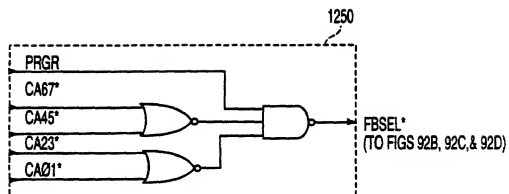


FIG. 92E

**FIG. 93A**

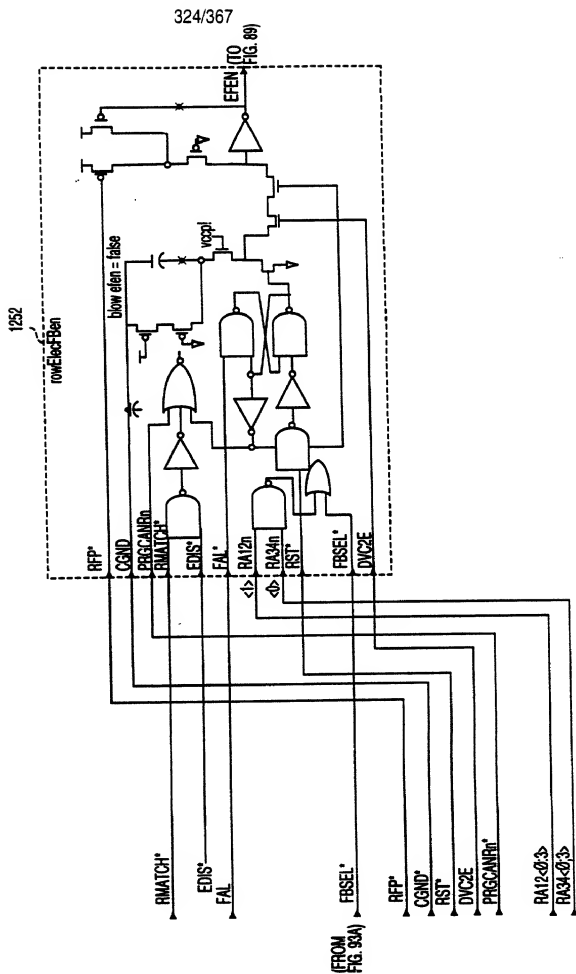


FIG. 93B

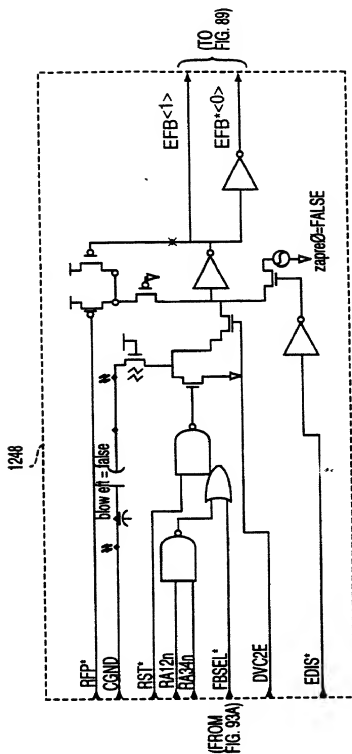


FIG. 93C

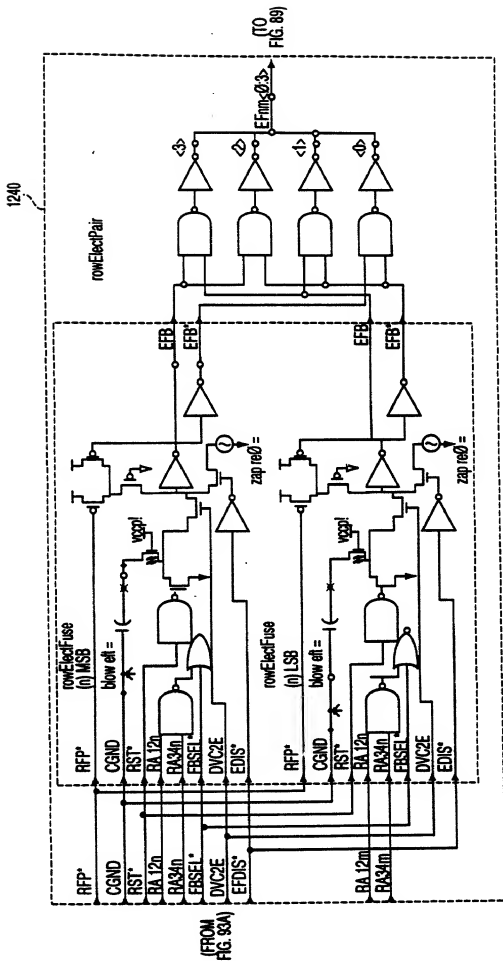
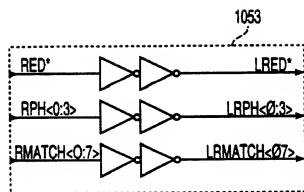
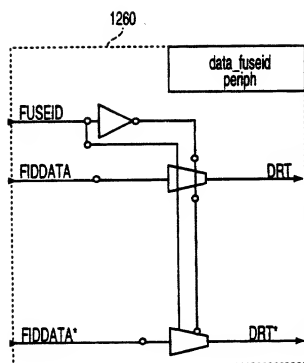
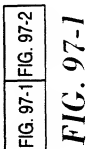


FIG. 93D

**FIG. 94**

**FIG. 96**



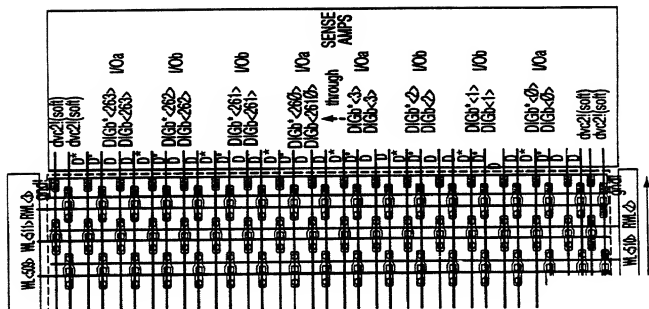
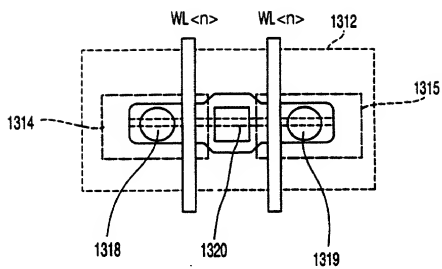


FIG. 97-1 FIG. 97-2

FIG. 97-2

**FIG. 98**

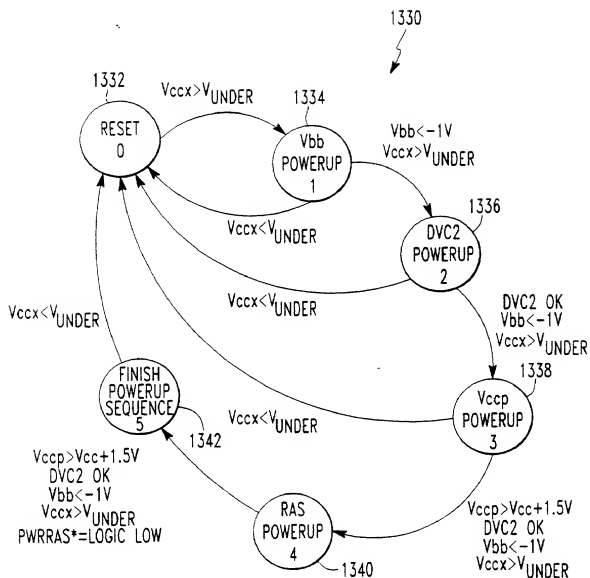


FIG. 99

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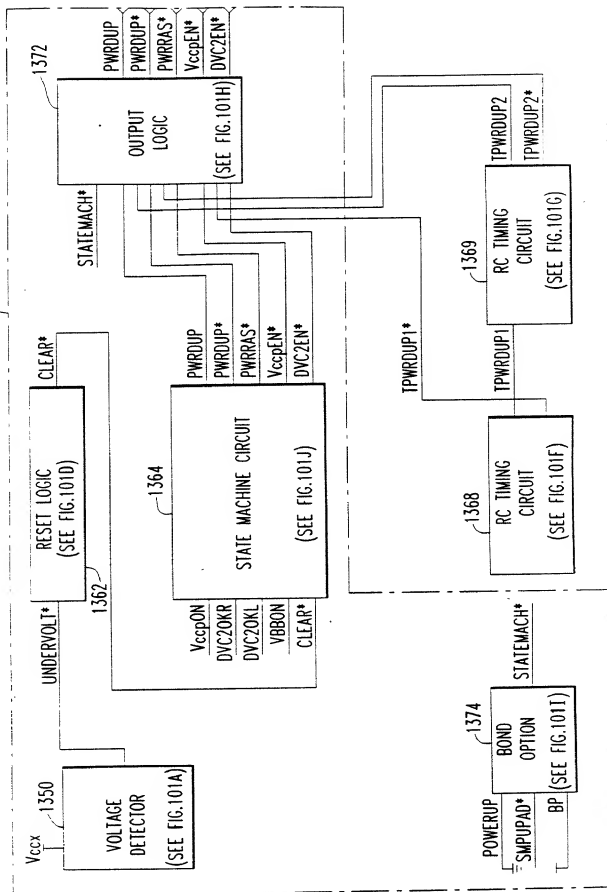
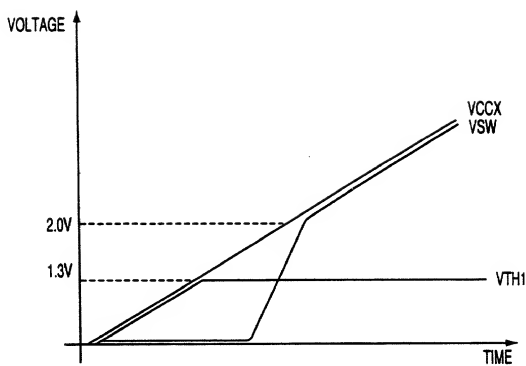
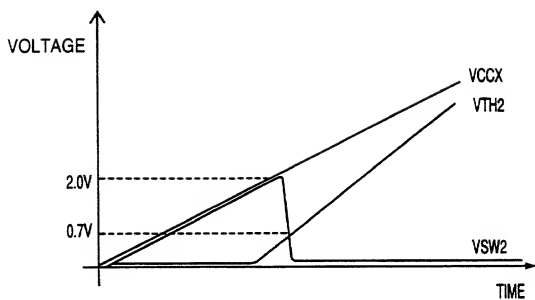


FIG. 100

**FIG. 101B**

**FIG. 101C**

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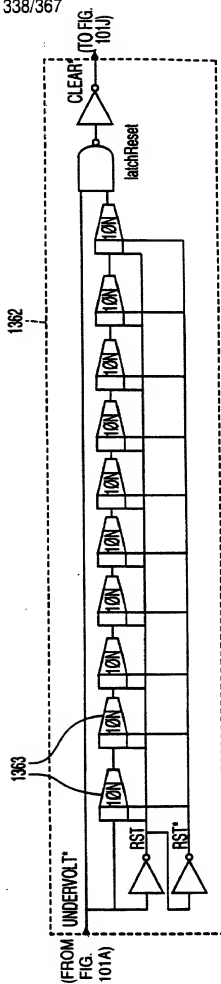
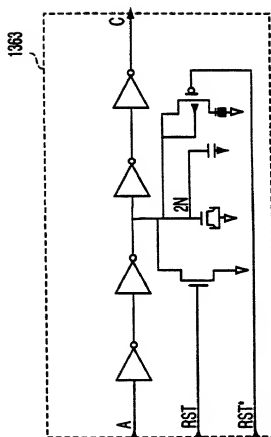


FIG. 101D

**FIG. 101E**

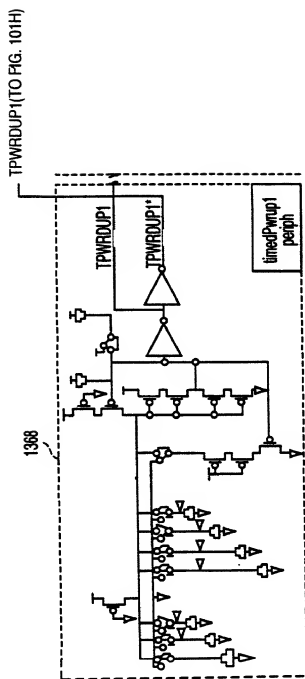


FIG. 101F

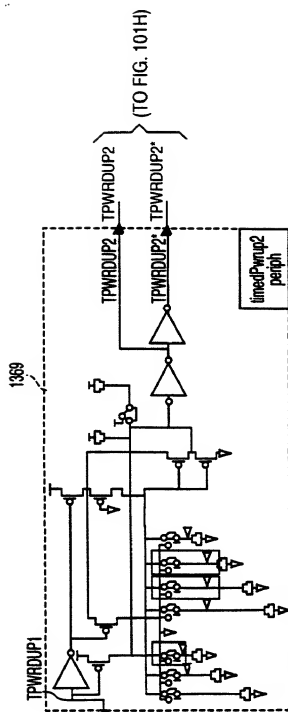


FIG. 101G

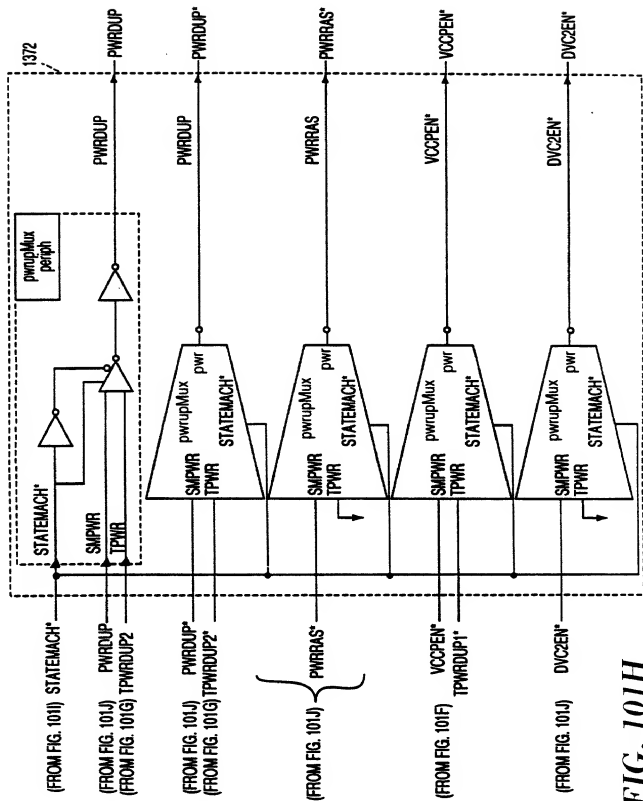


FIG. 101H

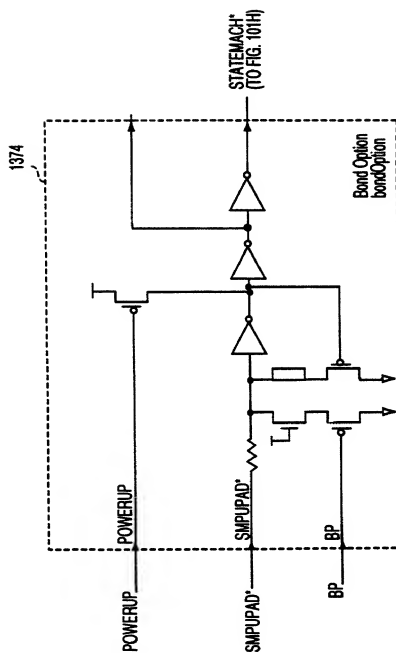
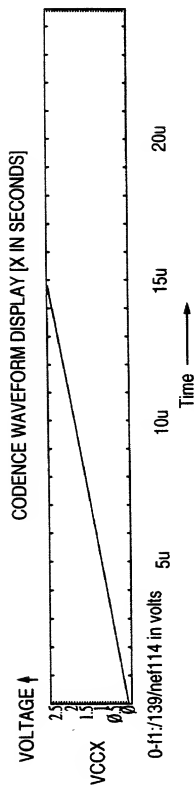
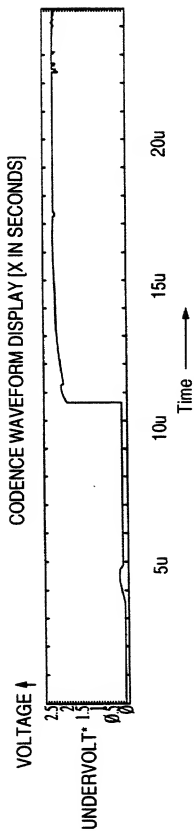


FIG. 101I



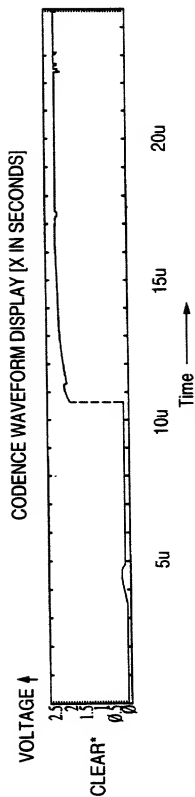
NOTE THAT PWRRAS* WAITED FOR DVC20KR

FIG. 102A



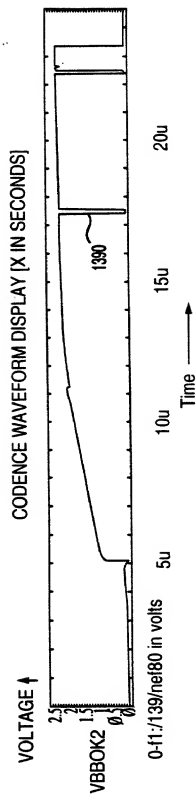
NOTE THAT PWRRAS* WAITED FOR DVC20KR

FIG. 102B



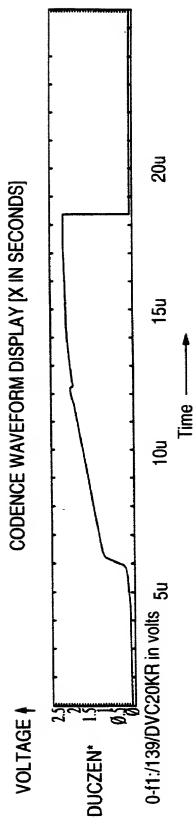
NOTE THAT PWRRAS* WAITED FOR DVC20KR

FIG. 102C



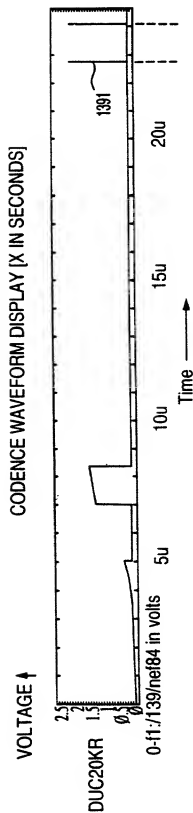
NOTE THAT PWRRAS* WAITED FOR DVC20KR

FIG. 102D



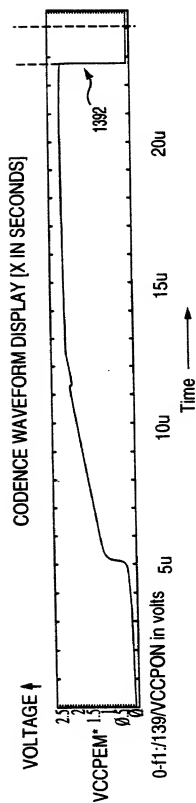
NOTE THAT PWRRAS* WAITED FOR DVC20KR

FIG. 102E



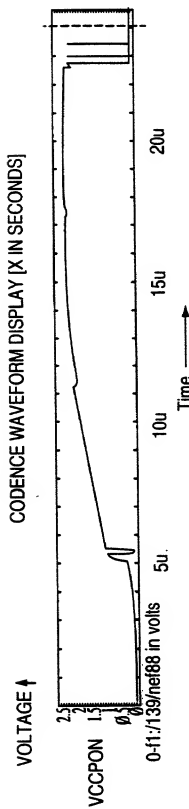
NOTE THAT PWRRAS* WAITED FOR DVC20KR

FIG. 102F



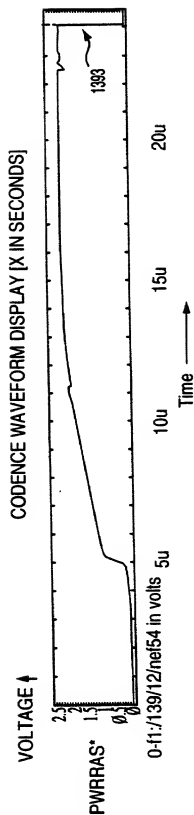
NOTE THAT PWRRAS* WAITED FOR DVC20KR

FIG. 102C



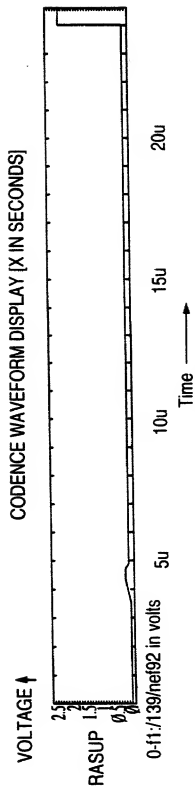
NOTE THAT PWRRAS* WAITED FOR DVC20KR

FIG. 102H



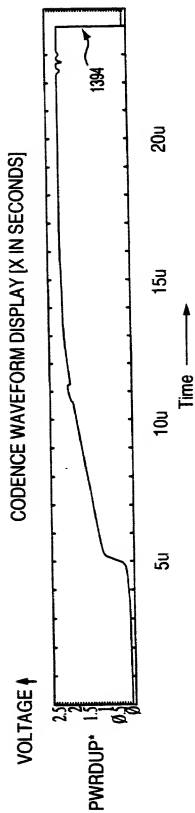
NOTE THAT PWRRAS* WAITED FOR DVC20KR

FIG. 1021



NOTE THAT PWRRAS* WAITED FOR DVC20KR

FIG. 102J



NOTE THAT PWRRAS* WAITED FOR DVC20KR

FIG. 102K

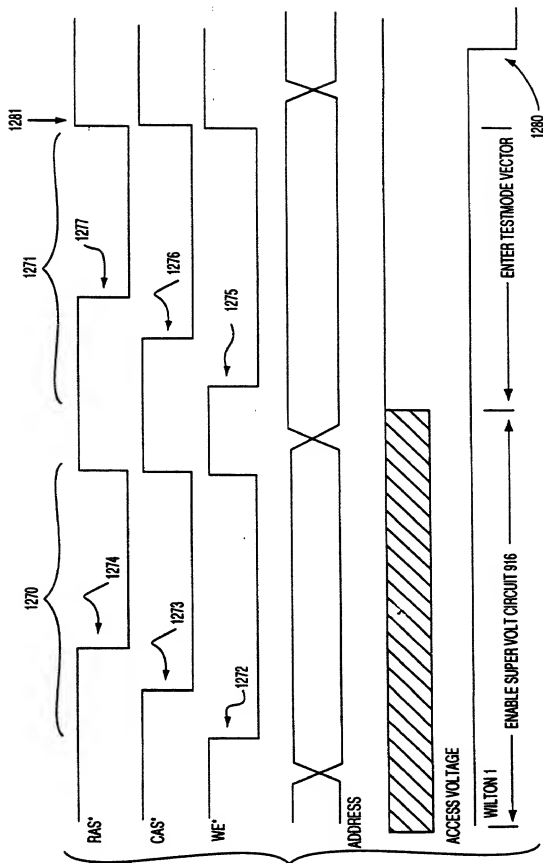


FIG.
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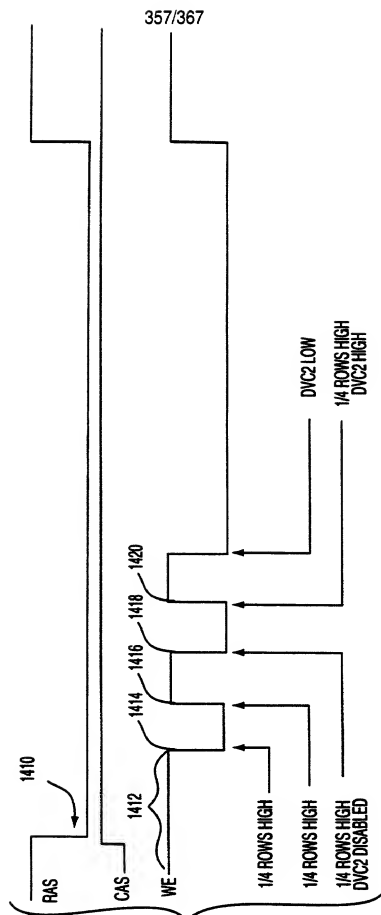


FIG.
104

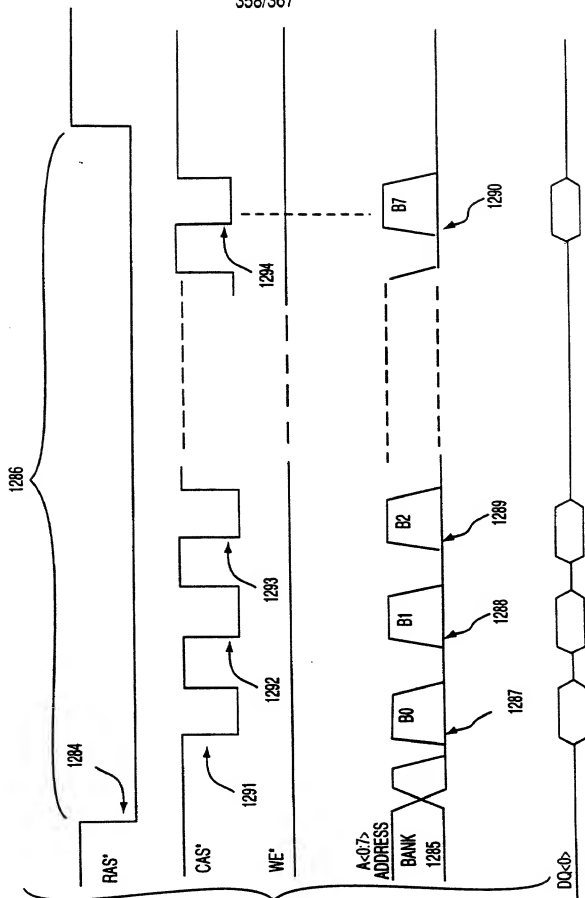
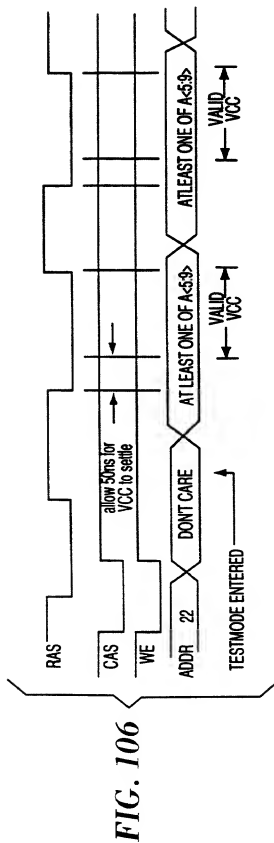


FIG. 105



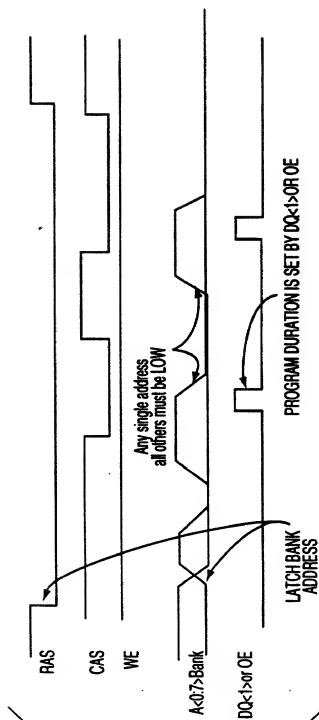


FIG. 107

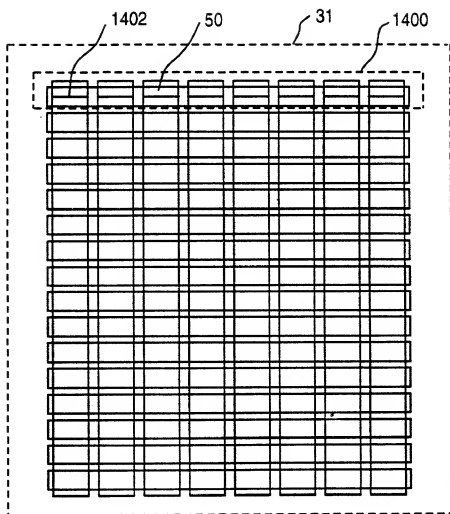
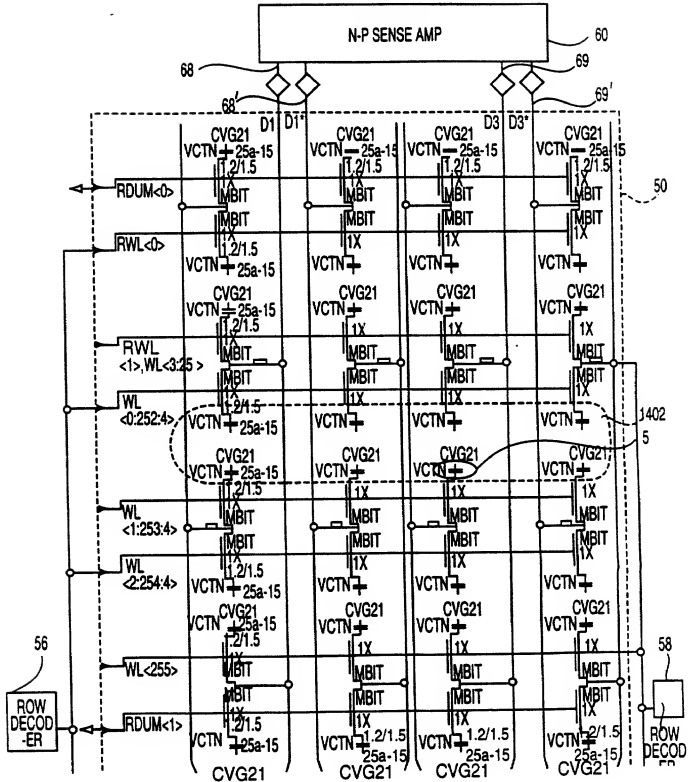
**FIG. 108**

FIG. 109-2



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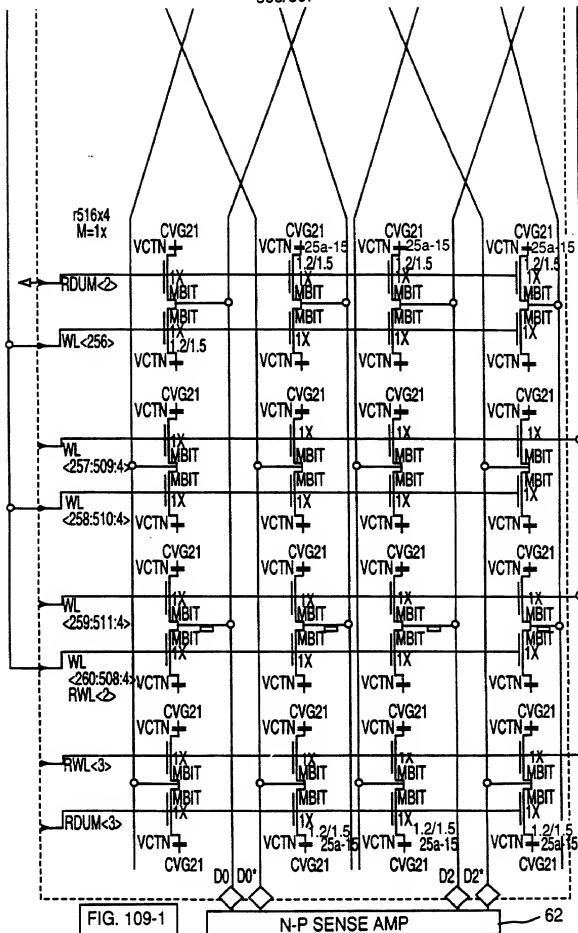


FIG. 109-2

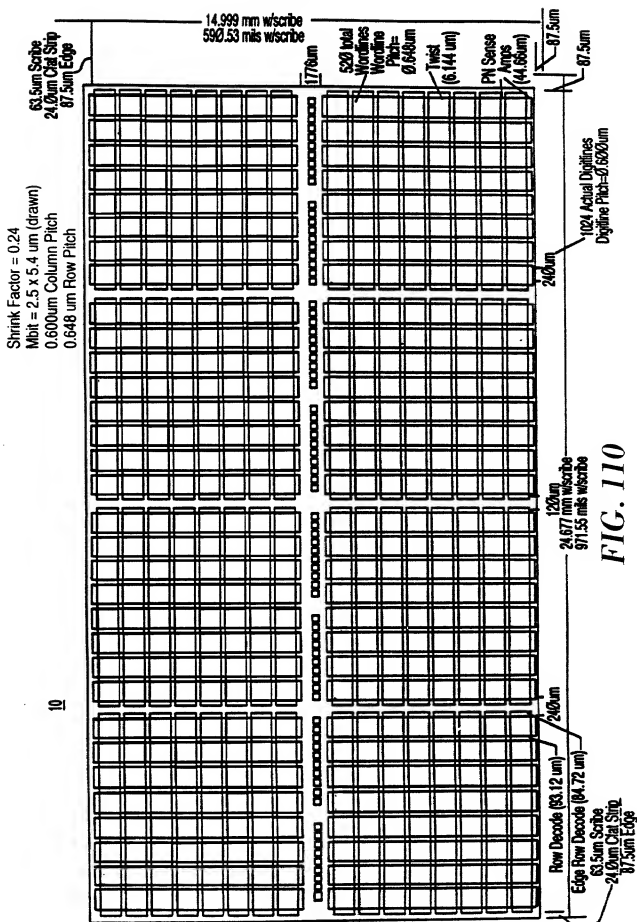
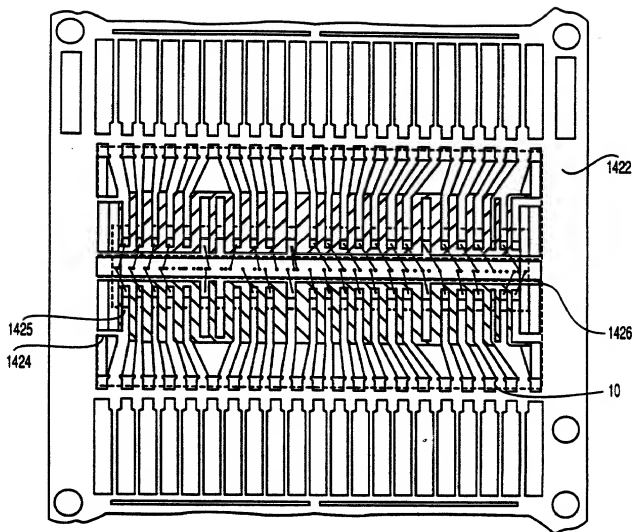
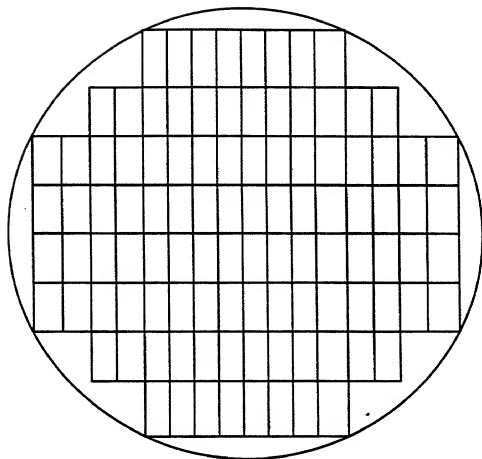


FIG. 110

**FIG. 111**

**FIG. 112**

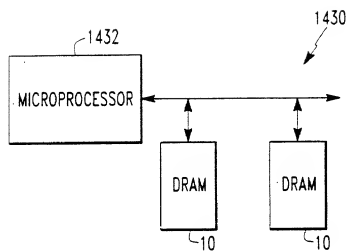


FIG. 113